



L'EXPOSITION
UNIVERSELLE



PARIS, 1889

THE CHEFS-D'OEUVRE

EDITION DE LUXE

LIVRAISON ONE

COPYRIGHTED, 1889, BY G. P.

PARIS, PARRIS FRÈRES
PHILADELPHIA, GEORGE PARRIS



DESIGN BY F. E. EHLMANN.

DE LUXE

INDEX OF THE PLATES

ARTIST.	SUBJECT.	PAGE
ARANDA, J. J.	THE CHESS PARTY	100 9
AUBLET, A.	READING THE SCORE	70 7
BENJAMIN-CONSTANT, J. J.	THE CHÉRIFAS	58 6
BOLDINI, J.	PORTRAIT OF MME. ———	64 6
BONNAT, L.	M. PASTEUR AND HIS GRAND-DAUGHTER	104 10
BOUGUEREAU, W. A.	SONG OF SPRING	40
BRETON, A. JULES	THE EVENING CALL	32 4
BRIDGMAN, F. A.	FÊTE OF THE PROPHET. AT OUED-EL-KEBR	3 2
CAROLUS-DURAN, E. A.	PORTRAIT OF Mlle. LEE-ROBINS	50 5
CAZIN, J. C.	JUDITH	16 3
CAZIN, J. C.	ON THE MARNE	18 3
CHALON, L.	CIRCE	82 8
CLAUS, É.	THE PICNIC	10 2
COLLIN, R.	MORNING	54 6
COMERRE, L.	PORTRAIT OF Mlle. ———	86 8
CORMON, F.	THE AGE OF STONE	88 8
CORMON, F.	THE VICTORS OF SALAMIS	88 8
DAGNAN-BOUVERET, P. A. J.	VACCINATION	30 4
DAVID, J. L.	CORONATION OF THE EMPRESS JOSEPHINE	110 10
DELORT, C.	THE SERENADE	106 10
FERRIER, G.	SALAMMBO (1815 from # 3?) half C. missing. Plate 24	24
GEOFFROY, J.	THE CLASS	22 3
GILBERT, G. V.	AUTUMN MARKET	76 8
GIRARDET, J.	AN UNKEPT APPOINTMENT	42 5
GIRON, G.	THE TWO SISTERS	68 7
GROS, L. A.	CAVALIERS CROSSING A RIVER	60 6
GUILLOU, A.	THE ARRIVAL OF THE PARDON	82
HEILBUTH, F.	THE PROMENADE	52 5

FULL-PAGE TYPOGRAVURES.

ARTIST.	SUBJECT.	PAGE
HITCHCOCK, G.	MATERNITY	102 9
JAMIN, J. PAUL	TRAGEDY OF THE STONE AGE	34 4
KUEHL, GOTTHARDT	THE ORPHANS	44 5
LAURENS, JEAN PAUL	THE POPE AND THE INQUISITOR	6 2
LE BLANT, JULIEN	THE SQUARE BATTALION	46 5
LEFEBVRE, JULES	DIANA SURPRISED	4 2
LEIGHTON, SIR FREDERICK	ANDROMACHE IN CAPTIVITY	Fronts. 1
LHERMITTE, L. A.	THE HARVEST	72 7
LUMINAIS, É. V.	FLIGHT OF THE KING GRADLON	20 3
LUNA, JUAN	"HYMEN, OH! HYMEN!"	36 4
MAIGNAN, A.	THE VOICE OF THE TOCSIN	12 2
MERSON, LUC-OLIVIER	LOVE AT THE JUDGMENT OF PARIS	14 2
MERSON, LUC-OLIVIER	THE WOLF OF AGUBBIO	14 2
PRADILLA, F.	THE SURRENDER OF GRENADA	62 6
RICO, M.	VENICE	26 3
ROCHEGROSSE, G.	ANDROMACHE	56 6
ROLL, A.	MANDA LAMÉTRIE, THE FARMER'S WIFE	74 7
SKREDSVIG, C.	ST. JOHN'S EVE IN NORWAY	48 5
STEVENS, ALFRED	THE VISIT	66 7
VAN BEERS, J.	EMBARQUÉS	84 8
WATERHOUSE, J. W.	MARIAMNE	98 9
WERENSKIOLD, E.	A COUNTRY BURIAL	108 10

FULL-PAGE TYPOGRAVURES

SUBJECT.	PAGE	ARTIST.	SUBJECT.	PAGE	
FAÇADE OF THE PALACE OF GREECE	xxxii 1	EHRMANN, F. E.	<i>The Letters, Sciences and Arts</i>	38 4	
GALLERY OF FINE ART—CENTRAL DOME	x 1	ENAULT, MME. A.	<i>The Abbess of Jouarre</i>	65 7	
GALLERY OF FINE ART—CENTRAL ROTUNDA	xvi 1	GIAÇOMOTTI, H. F.	<i>The Centaur and the Nymph</i>	28 4	
GENERAL VIEW, FROM THE TROCADÉRO	vii 1	LAURENS, J. PAUL	<i>Ceiling of the Odéon Theatre</i>	5 2	
THE LUMINOUS FOUNTAINS	xxii 1	LE BLANT, JULIEN	<i>Mess-Time</i>	47 5	
THE STREET OF CAIRO	xxviii 1	LUCAS, F. H.	<i>The Virgin's Thread</i>	96 9	
PALACE OF THE MINISTER OF WAR	xxxviii 1	MAZEROLLE, A. J.	<i>The Fairies' God-Daughter</i>	78 8	
PAVILION OF THE PASTEL SOCIETY	xlii 1	PELEZ, F.	<i>Grimaces and Misery</i>	73 7	
PORTION OF THE SÈVRES EXHIBIT	114 10	PETITJEAN, E.	<i>Voray (Haute Saone)</i>	112 10	
ARTIST.	SUBJECT.	RICO, MARTIN	<i>Venice</i>	27 4	
BARRIAS, J. FELIX	<i>Triumph of Venus</i>	80 3	ROCHEGROSSE, G.	<i>Vitellius in the Streets of Rome</i>	57 6
CAZIN, J. C.	<i>Souvenir of the Fête</i>	90 9	SCHOMMER, F.	<i>The Defense of Pantin</i>	94 9
CESBRON, A.	<i>Fleur du Sommeil</i>	75 7	THIRION, E. R.	<i>The Poet and the Source</i>	92 9



Front.

ANDROMACHE IN CAPTIVITY

FROM THE PAINTING BY

SIR FREDERICK LEIGHTON



EDITION DE LUXE

THIS COPY IS PRINTED FOR

MR. C. M. FARRAR, BUFFALO, N. Y.



1889

CHEFS-D'OEUVRE

DE L'

EXPOSITION UNIVERSELLE

DE

PARIS, 1889

BY

WILLIAM WALTON

AND OTHERS



PHILADELPHIA

GEORGE BARRIE

PUBLISHER

PARIS

BARRIE FRÈRES

RUE SCRIBE, 19

COPYRIGHT, 1889, BY G. B.

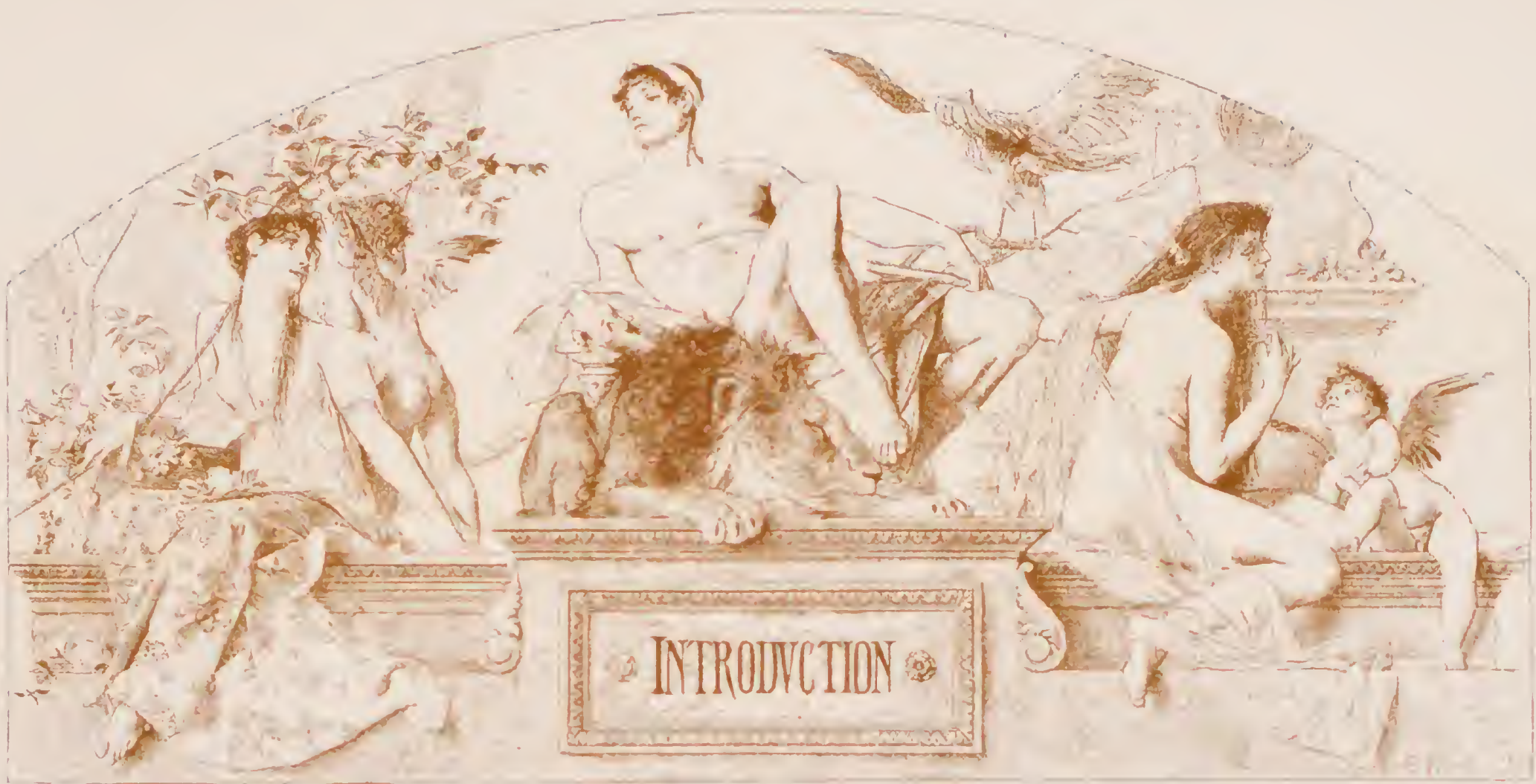
F
4803
W 32
1889
V. 1
chmexrf

INTRODUCTION

THE EXHIBITION



GENERAL VIEW, FROM THE TROCADÉRO.



GERMAN SECTION.]

THE KINGDOMS OF NATURE. DESIGN BY KLIMT.

THE BUILDINGS OF THE EXPOSITION.



L'ANTI est sapere! The French, who began so many new things at the end of the last century, originated the first International Exhibition, in 1798, by a circular addressed by the Minister of the Interior to the authorities of the various departments. In this he announced that the government, which was then the Directory, had formed the project of offering to the public an entirely new spectacle, that of an exposition of the products of French industry. This document bore date the 9th Fructidor of the year VI; the office of the Minister of Commerce and Industry was not yet created, and the Minister of the Interior included in his functions the departments of Arts and of Manufactures. This able official, whose name is worth perpetuating, was François de Neufchâteau; the first idea of the government was merely that of giving the people a new fete, a popular diversion, and this idea was suggested by the success of the festival organized in the course of the same year to celebrate the triumphal

entry into the capital of the various trophies of art and science sent home by the Army of Italy. But their Minister, in his circular, appealed to the nation to demonstrate by a display of the products of the various industrial arts the ability of France to maintain her high position among the civilized nations, to surpass her rivals and to vanquish her enemies. These rivals and enemies at this moment were the English; the army for the invasion of that island had already been formed and the command given to General Bonaparte, and the combat was to be waged on the fields of industry, commerce and internal development as well.

The Exposition was accordingly held on the site where all the national fetes had been celebrated since the commencement of the Revolution, the Champ de Mars. In addition to the amphitheatre which occupied the

middle of this open space a square enclosure was prepared, surrounded by arcades, under which were exposed the objects displayed by the various merchants and manufacturers. These had been exhorted to send only their best wares, and the government undertook to exercise a special surveillance over the security of both merchandise and persons during the continuance of the Exposition. A hundred and ten exhibitors were represented; a jury named by the government from among the most distinguished citizens connected with the industrial arts selected a dozen of these whose products were chosen from among the others and exposed by themselves in a building specially erected in the middle of the enclosure and called the "Temple of Industry," and the exhibitors themselves offered to their fellow-citizens as worthy of the national recognition in the succeeding fete, that of the 1st Vendémiaire. A numerous orchestra furnished each evening at the Temple of Industry a selection from the best musical composers of the period; at eight o'clock on the eve of the 1st Vendémiaire a salvo of artillery from the palace occupied by the Directory was repeated by others in the environs of Paris; an hour later, another salvo was fired and at the same moment a shower of rockets—at least six hundred—was set off from the platform of the Pont-Neuf and at this signal "great masses of fire appeared on the towers, the highest domes and the telegraphs." It was the Universal Exposition of 1889 in little!

Encouraged by the success of this first experiment the Minister of the Interior formed the plan of repeating it on a larger scale the following year, but the interval was decided to be too brief and the second Exposition was not held until 1801. The number of exhibitors this year was exactly double that of 1798; the following year the third display was organized with five hundred and forty contributors. From this date they succeeded each other at intervals of from three to seven years with constantly increasing numbers until 1849, when the eleventh was opened with over four thousand five hundred visitors. The first International Exhibition, as is well known, was held in London in 1851, but the French claim that the idea originated with them as early as 1834, when an enterprising citizen of Abbeyville, in an address to his fellow-townsmen, set forth the advantages of a European Exposition. The government of the Second Republic, on the occasion of the national fair of 1849, consulted the Chambers of Commerce as to the advisability of making this exhibition an international one, but the latter declined to sanction such an innovation. The first French Exposition Internationale was held in Paris in 1855; the second, in 1867, and the third in 1878. The total number of visitors to the first was five millions; to the second, ten, and to the third, sixteen. To that of 1889, the greatest of all, the increase has been so great from the very opening that during the first two weeks the number of paying entrances exceeded those of the same period in 1878 by over five hundred thousand.

The Paris Exposition of 1855 was, however, strictly speaking, the first International Exhibition of Fine Arts. The Emperor's announcement of the Exposition was dated the 8th of March, 1853; a second decree, under date

of the 22d June, based on the consideration that "the means of perfecting the works of industry are closely connected with those of the Fine Arts," ordered the special organization of a section of painting, sculpture, engraving and architecture. The main exhibition was held in the Palais de l'Industrie, now devoted to the annual Salons; a special gallery was erected, avenue Montaigne, for the Fine Arts. In 1867, the Exposition was transferred to the Champ de Mars; that of 1878 annexed the Trocadéro, on the opposite side of the Seine, and that of 1889 not only includes both these localities, but also all the Esplanade des Invalides and the Quai d'Orsay, connecting the Champ de Mars with the latter—in other words all the available space not built upon in the neighborhood. Where the Exposition of 1900 will lodge itself it is difficult to state; it will



JAVANESE DANCERS AT THEIR TOILET.



DURING THE ENTR'ACTE.

probably have to move out to some of the larger sites that were suggested for the present gathering, the plain of Gravelle or the plateau of Courbevoie. It is fortunate that none of the short-sighted projects for establishing the present Exhibition in the heart of the city were adopted—in the Palais-Royal connected with the Place du Carrousel, or on the Seine, covered over, from the Jardin des Plantes to Passy.

The general plan of the present Exposition, then, differs very considerably from that of 1878, though so much of the same locality is occupied by the principal buildings. The visitor may still stand in the centre of the Trocadéro palace and look down the hill, over its tumbling cascades, across the bridge of Jena and the Seine to the main display on the Champ de Mars, but the view varies considerably from that of eleven years ago. The first object that strikes his eye naturally is the Eiffel Tower, rising exactly in the centre of his field of vision, just across the river, and under whose gigantic iron archway he will probably pass after crossing the bridge to reach the most important part of the Exposition. Indeed he will not have had to wait until this moment before seeing this monument; some of his fellow-passengers will probably have called his attention to it through the windows of his railway carriage as his train approached Paris. From any reasonably open space in the city its lofty summit may be seen. Some worthy subscriber, in an exceedingly remote department, gave himself the trouble to write to his journal, *Le Temps* or *Le Figaro*, that he had seen, the evening before on the horizon, the revolving light on the top of this beacon, and the editor, accepting his statement, computed that the space thus covered by its rays was equal to one-twelfth the entire surface of France. It may be mentioned, *en passant*, that the Tower, rather disappointing at first sight, is much more impressive at night than by day, particularly so when the slowly revolving electric light on its summit seems to roof the heavens with its immense rays, or the occasional red fires burned on all its stages at once render it incandescent from bottom to top against the black sky. From the visitor's present perch, however, in the central pavilion of the Trocadéro, it rather interferes with his view of the glittering treasures of the Champ de Mars beyond, in which he is probably more interested for the moment than in M. Eiffel's monstrosity. To the right and left of it he may see the two lofty blue porcelain domes of the palaces of the Liberal Arts and the Fine Arts, but the great gilded dome of the main building, crowned with its gigantic flying figure of France, he probably cannot see till he comes down to the level of the bridge, as in M. Lepère's sketch.

We may imagine him then, after his first survey of the wide field before him, descending the hill towards the Seine and resolutely turning his back on all this part of the Exposition, the galleries of retrospective French industrial art and of monumental sculpture, the very splendid display of horticulture, the aquarium and the exhibit of forestry, and reaching the bridge of Jena by means of one of the two light bridges or "passerelles" which carry him over the quay without disturbing the traffic underneath. He will find all these bridges, and indeed most of the main lines of communication in the Exhibition grounds, covered with neat and handsome awnings, furnishing a very acceptable defence against the noonday sun overhead or against one of the frequent thunder-storms which the iron mass of the Eiffel Tower brings to pass. On the farther side of the Seine he will see stretching to right and left of him along the quays, the various examples of dwellings of all ages, illustrating M. Garnier's very interesting History of Habitation, which he will return to later, and rising before him of a truly surprising bigness, the immense arches of the new tower of Babel. These arches, springing from the four pillars of iron and masonry, corresponding to each of the cardinal points of the compass, "tumble home," towards each other, and carry, at a height of a hundred and eighty-five feet, the first platform of the colossus. It is here that the real size of the tower first begins to impress itself upon the mind; the smooth, unbroken curve of these gigantic supports is very imposing. The human figures on the first landing above are already reduced to children; farther out in the enclosure, if one have good eyes, he may see those in the topmost gallery as infinitesimal puppets.

Directly under the centre of this archway is an ambitious allegorical fountain group by Monsieur de Saint-Vidal, which is intended to illustrate "Night vainly endeavoring to restrain the Genius of Light, who advances, her wings displayed"—but which does not do so very clearly. For some distance around the base of the Tower are grouped a number of buildings of various kinds, that of the Manufactures of the State, of Telephones, of Gas, the Swedish and Norwegian chalets, that of the Suez-Panama Canals, the larger palace of Mexico, and those of several South American States. For all these, for the moment, the stranger has no eyes; before him stretches a green and smiling garden which in itself is one of the *Chefs-d'Œuvres* of this great show. In its centre rises the very large, cheerful monumental fountain group by Coutan, the sculptor, glittering white in the



ALGERIAN INTERIOR.



GALLERY OF FINE ART—CENTRAL DOME.

sunshine, and around it on three sides are long, large buildings, very rich in ornament, and containing all the treasures of the nations. The abundance and richness of the color, carving and detail of these buildings has excited much discussion; the critics are no more of one mind on the subject than the commonalty, and so distinguished an expert as the President of the Royal Academy, for instance, has averred that though much of the ornamentation was undoubtedly very fine, much of it was also what was known in his native isle as "gummy." The Parisians, however, who have never heard of this dreadful adjective, contend that for a summer festival, for a transient, holiday-making show, the riot of ingenuity, abundance and extravagance which sets forth these façades and domes is plentifully justified. Certainly, no other nation could have furnished them with such bountifulness and such general good taste;—the heavier-handed Britisher or Teuton, the more scantily experienced American, could never have invented and maintained such a fanfaronade over a surface of two hundred and eighty thousand square metres. The most profligate of all, the central pavilion and dome, needs but the tempering of a little distance to bring all its parts into harmony—from the foot of the Eiffel Tower, for instance, it becomes a handsome, metallic monument, hammered out of pale bronze and dark gold and rising richly against the long gray line of the Gallery of Machines and the sky. The long stretches of gaily striped awnings in this park flutter with banners; all the walks and most of the buildings are fringed by innumerable statues, in bronze, in marble, and in that charming creamy-white plaster, handsomer than either, which the French sculptors know so well how to handle; the green swards are broken by fringes of flowers and, in the earlier days of the Exposition, by superb and pompous masses of rhododendrons, large as a baby's head, which seemed to have been specially created for this grandiose occasion. The tourist may begin to think that his voyage from Chicago or from Peking has not been in vain.

The arrangement of the general plan of the Exposition differs entirely from that of 1878; the "table of Pythagoras" which was considered so clever at the time and by means of which the visitor, marching in one direction, traversed all the various classes and by going at right angles, the various nations. The gallery or palace of the Fine Arts, instead of being, as then, the central axis of the main building, has an edifice all to itself, on the eastern or Paris side of the garden, and an exactly similar building on the other side is devoted to what have been classified together as the Liberal Arts. These palaces, interrupted each by a transverse gallery, are continued farther back till they abut on the wings of the great main building which, extending all the way across the Champ de Mars, connects them like the toe of an immense right-angled horse-shoe, and which, with the Gallery of Machines behind it, occupies all the remainder of this enclosure. The City of Paris, instead of occupying a gallery in the middle of those of the Fine Arts, as in 1878, has two separate buildings of its own, set one on each side of the patch of greenery which lies just back of the central fountain and



JAVANESE DANCERS.

just in front of the central dome, the latter, naturally, occupying the exact middle of the toe of the horse-shoe. The general classification of the exhibits, it may be added, differs very little from that of 1878.



THE EIFFEL TOWER.

The immense Gallery of Machines, which forms, as it were, the basement or background of all this lighter and more frivolous exhibition, is one of the wonders of construction of the age. Its length is some thirteen hundred and seventy feet; the immense iron arches which, springing from the ground, carry its unbroken roof, could all but take in under their curves the Arch of Triumph.

Their opening exceeds by more than thirty-seven metres that of the girders of the great railway station of Saint-Paneras in London, which were, up to this date, the largest ever constructed. This magnificent building is almost the only one of all those on the Champ de Mars, which is to be left standing, and it is in contemplation to preserve it for a cavalry riding-school. Notwithstanding its utilitarian character, the ubiquitous

decorator has been here also; the lower panels of the curved roof, between the gigantic ribs, are covered with painting and carving, very quiet in taste, but almost infinite in detail. The coats-of-arms of all the chief towns of the departments of France, of the principal cities of the French colonies and of the capitals of foreign countries are represented, with appropriate surroundings of their products, characteristics, emblems, attributes, etc., etc. The two great gable-ends are also embellished; the western one with an immense window representing the battle of Bouvines, and

the eastern one by another which carries in an arch more emblazonnements, those of the principal countries which have contributed to the Exposition. The main entrance to the gallery, which is in this end, is flanked on each side by gigantic groups representing respectively "Steam" and "Electricity," executed in plaster

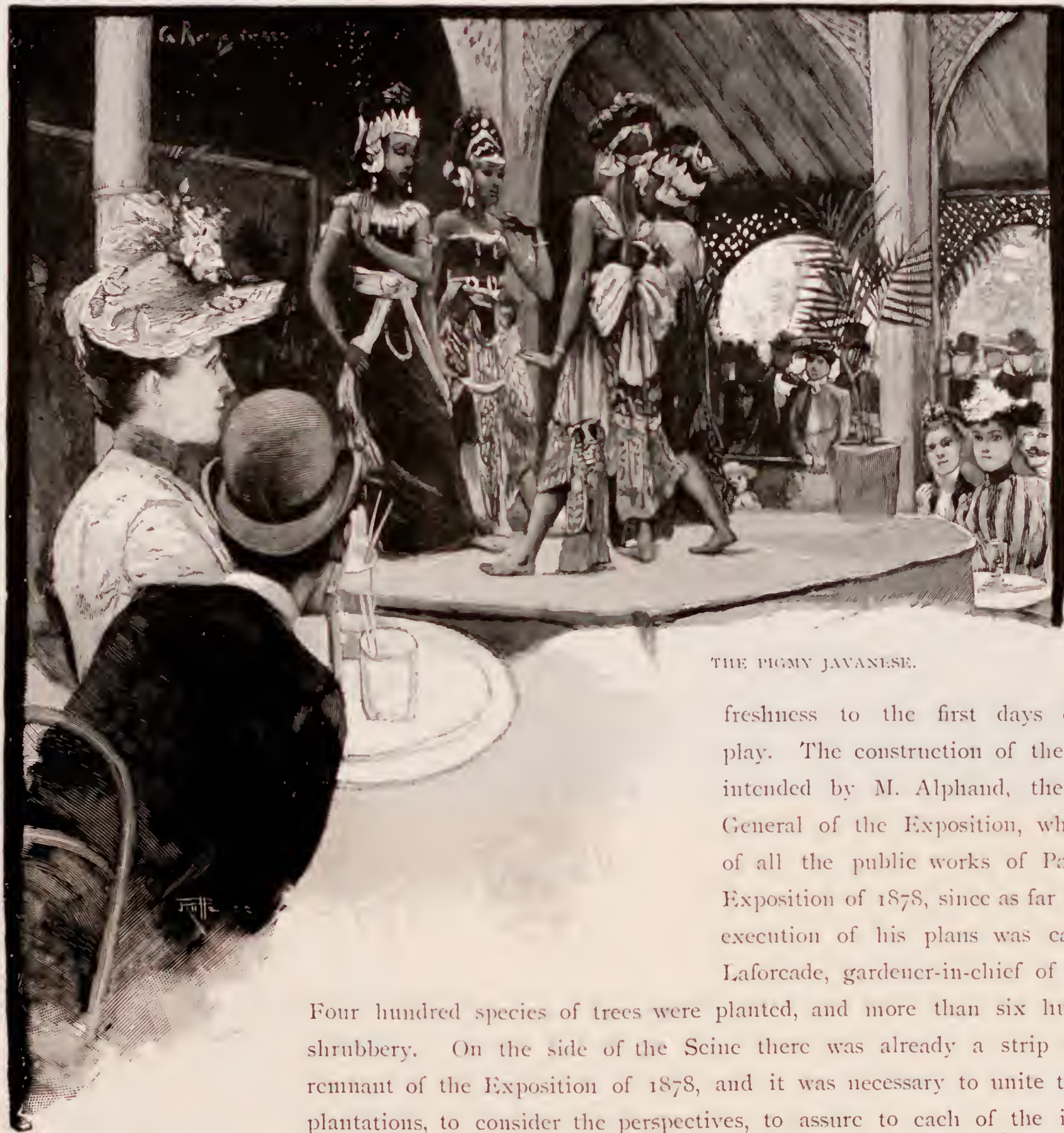
by the sculptors Chapu and Barrias, seven metres in height and of a disquieting vivacity considering their bigness.

Along the quays bordering the Seine, above and below the bridge of Jena, are a great number of minor exhibitions in addition to those of the History of Habitation. Some of the largest and handsomest of these buildings are erected on the edge of the water: their lower floors were completely submerged during the rise of the river in March of this year. The passengers on the rapid little steamers which run up and down the Seine view with approbation these graceful façades in the pale tints of the stucco, rising like the palaces of another and very new Venice. The first of the largest of these is the circular edifice of the Panorama of the Compagnie Transatlantique, with its outer walls covered with a series of immense maps, and there are also the buildings of the Exposition Fluviale et Maritime, of Petroleum, of Alimentary Products, of Agricultural Products, Machinery, etc., the Spanish pavilion, etc. One of the features of the exhibit of Produits Alimentaires is an immense tun—much larger than that of Heidelberg or any other known—sent by an enterprising firm of champagne makers, and with its two vast ends covered with elaborate and appropriate carvings. It is related that it was only brought to its destination with infinite trouble; a dozen oxen were required to draw it; on two or three occasions the roadbed gave way under it, and it was necessary to demolish the gateway of the octroi before it could enter Paris.

The Esplanade des Invalides, between the famous gilded dome and the river, is occupied by one of the most varied and picturesque portions of the Exposition, the various colonial exhibitions and those of the Ministers of War, of Public Instruction, etc., that of Hygeia, of Social Economy and the various French colonial displays. The building of the Minister of War is a handsome white edifice decorated with trophies and statues and its entrance defended by a small but effective donjon with a moat and portenllis of the most approved ante-gun-powder pattern. There are also very neat little palaces representing respectively Algeria and Tunis and surrounded by appropriate konbas, minarets, terraces and domes forming a North African town in miniature. The Colonial department includes Cochin-Chinese, Senegalese, Annamite, New Caledonian, Pahouin, Gaboonese and Javanese villages, inhabitants and all! Very great pains and expense have been taken to make this ethnographical display complete and authentic, and the delighted Parisian, who hates to travel and who loves to see strange peoples, wanders at will through a bewildering variety of architecture and a very considerable variety of costumes and types. He can even penetrate into a Tunisian café, be served with little cups of black coffee by red-fezzed attendants and see the veritable dances of the East performed before his eyes by black-haired honris specially imported for the purpose. The Javanese dancers are still more curious and much handsomer; and on the western side of the Champ de Mars is the famous "Street of Cairo," said to be a faithful reproduction, in which there are more dances in cafés, white donkeys in the streets and real Egyptian donkey-boys!

The central garden of the Exposition is not one of the least surprising features of the great show, and, strange as it may seem, is one that is probably the most enjoyed. Fine arts, machinery, chemical products and textile fabrics each appeal only to a certain limited portion of mankind; the pleasure of green swards, flowers, trees, sunshine, a fountain playing and a military band discoursing, are appreciated by all the world. The most zealous of specialists comes out from his particular gallery or section, after three or four hours' close attention, fatigued in all his members at once; it is with the most genuine experience of relief that he selects one of the innumerable two-sous chairs which the thoughtfulness, or canniness, of the Administration has provided, and rests his soul by the contemplation of this smiling face of artificial Nature. The mere being out-of-doors in summer is always pleasant in Paris; the stranger falls into the habit as naturally as the native. The crowd that fills these walks and occupies the aforesaid chairs or the more economical benches visibly expands in enjoyment; there is a pervasive sense of festival in the atmosphere, which M. Lepère's spirited drawings cleverly suggest, but which has to be experienced to be truly appreciated. The sapient visitor devotes his morning to his specialty in some of the innumerable galleries, at noon he takes his déjeuner comfortably in one of the numerous restaurants, of many nationalities, which occupy the long porches, fronting on the garden, of the two lateral palaces, and after coffee transfers himself and his tobacco to a shaded seat in the open. The most exacting conscience, the liveliest anxiety, folds itself up under these circumstances and goes to sleep like an infant.

It was not without a due taking of things in season that all these trees, some of them a yard in diameter and fifty years old, were brought to their present state of luxurious growth in what was formerly the sandy



THE PYGMY JAVANESE.

waste of the Champ de Mars. As soon as the general plan of the Exposition was resolved upon, in August, 1887, the soil was prepared and the shrubbery transplanted; the green swards were provided later and the flowers brought at the last moment to add their

freshness to the first days of the great display. The construction of the parks was superintended by M. Alphand, the veteran Director General of the Exposition, who has had charge of all the public works of Paris, including the Exposition of 1878, since as far back as 1854. The execution of his plans was carried out by M. Laforcade, gardener-in-chief of the city of Paris.

Four hundred species of trees were planted, and more than six hundred varieties of shrubbery. On the side of the Seine there was already a strip of park, the last remnant of the Exposition of 1878, and it was necessary to unite this with the new plantations, to consider the perspectives, to assure to each of the innumerable small buildings facility of access, to supplement their architecture by the foliage, to surround the foreign pavilions with the trees and shrubbery appropriate to each. More than this, a serious effort was made to furnish each of M. Garnier's examples of historic habitations with the plants that pertained to it. Around the lacustrian village, for example, are aquatic plants; around the Persian palace, almond trees, jasmines and poppies; the Phœnician, Assyrian and Hebrew dwellings have judas trees, cedars of Lebanon, willows of Babylon, Damascus roses, hollyhocks, and those white hibiscus spotted with brown. For the Japanese are Japanese willows, chrysanthemums and catalpas; for the Chinese, alanthus and bamboo. Around the Hindoo are figs, canes and the castor-oil plant. And, moreover, over on the Trocadéro hill was opened a bewildering horticultural exhibit, including a more complete collection of the flowers of Japan than was ever seen before. At nightfall the illumination of all these buildings and gardens transforms the entire Exposition, if not into the much-quoted "fairy-land," at least into something rather superior to that version of it to which we are accustomed in the metropolitan theatres. The long lines of the architecture of the Trocadéro and the Eiffel Tower are defined by the closely-strung beads of yellow gas-lights; the Pavillon du Gaz is ablaze from top to bottom; the great central dome, at the other end of the garden, with its mass faintly lit from inside with red light, is girdled and festooned and crowned with a great crown, all of the same yellow light, which burns opaque in contrast with the brilliant white points

of electric light shining like diamonds. The long rays from the beacon on top of the Eiffel Tower are turned on the great gilded figure of France on top of this dome, and seem to flatten it into silver against the dark bluish sky. The numerous jets of water from the large central fountain, cunningly supplied with colored electric lights from underneath, spout alternately far more brilliant colors than the rainbow's, and an entirely new sheaf of water, reserved for these nocturnal displays, lifts very high in the air a constantly changing fountain of incandescence. All the long lines of the grass-plots are defined with rows of little bulbs of light; the statues gleam mysteriously thus lit from underneath, and the shrubbery takes on new forms and masses and falls into menacing shadows. It is the triumph of Science, made to furnish unwillingly food for the Imagination.



INDOUBTEDLY, however, it is the architects and the engineers who have carried off the principal honors of the Exposition, and thus avenged themselves for the indifference and ignorance with which their works are generally received by the crowd of sightseers. "Peuh! what is an architect, anyhow?" asks a scoffing Parisian, "a Monsieur who piles stones one on another, sticking them together with plaster, and who gets himself an easy income by making an estimate of 2178 francs mount up to 300,000 francs and some centimes?" But in view of the general, all-round success of the Exposition buildings—deducting, of course, the inevitable errors and backslidings of all human enterprises—the French are rather of the opinion that the year 1889 is to mark a new departure in modern architecture; that the old, conventional, "Academical" falling back upon the formulas and methods of the past is to be abandoned. In its stead is to

be a new art, adapted to the climate, the circumstances of modern civilization, and making use freely of all the means which modern science and the development of modern industries are to offer it. It was upon this principle that the architects of the most important buildings of the Champ de Mars, MM. Dauter, Bouvard and Formigé, proceeded and, though they have been accused, M. Formigé especially, of occasionally falling back upon the *demodées* formulas of their early education, their general success in erecting both handsome and appropriate buildings was such as to be appreciated by even the untechnical populace.

The two lateral palaces of the Beaux-Arts and of the Arts Libéraux, one along the avenue de Labourdonnaix and the other parallel to the avenue de Suffren, similar in external appearance, are the work of M. Formigé. The two large central domes of these buildings, sixty metres in height each and covered with enamelled tiles, white, turquoise blue, yellow and gold, rest on circular attic walls of brick, buttressed with consoles crowned with vases of enamelled terra-cotta three metres in height, and between each console an *vil-de-banuf*. The grand entrances, opening immediately under these domes, include three arcades, with round arches on the sides towards the gardens and elliptic arches on the exterior. The archivolts and pilasters of these arcades are richly ornamented with arabesques and trophies in terra-cotta and tiling; the attic which surmounts them is pierced with three niches each in which are seated statues personifying the fine arts and the liberal arts, and between the niches is a grand frieze in terra-cotta. The bricks of which the lateral walls are built are of handsome pinkish-yellowish grays, and the iron pillars, which separate the large window openings, are generally of a very good greenish-blue, panelled with



EGYPTIAN DONKEY BOY.



BRIDGE OF JENA AND THE TROCADÉRO.

yellowish terra-cotta. These pillars carry at the top large coats-of-arms in enamel of the different nations exhibiting, and are crowned with metal work which supports masts bearing alternately the banners of France and of other nations.

The line of the flooring of the second story is indicated by a sculptured balustrade; along the top of the wall runs a handsome frieze under the cornice and, over this, another balustrade. The frieze has a gold ground and the ornaments upon it are of a good old ivory color. These are little boys, in very high relief, supporting long panels inscribed with various geographical names and ornamented above and below with scrolls and wreaths in polychrome. Both these buildings terminate at the ends towards the Seine in pavilions surmounted by smaller domes of the same color as the central ones, but rising from square bases.

The criticisms which have been levelled at M. Formigé's handsome edifices may be summed up as the absence of visible connection between the bases of the central domes and the roofs of the galleries, the monotonous repetition of the initials "R. F." around these domes—and, indeed, the monotony of the interminable letterings along the frieze of the walls, the inadequacy of the vases around the base of the eupolas and the singular oversight by which he neglected to provide wall space for hanging the pictures, so that the windows of the Palais des Beaux-Arts had all to be boarded up after they were completed. These closures were covered with a warm dull red which, from the outside, harmonized very well with the color of the walls. Some fault was also found with his arrangement of the central stairways which occupied space that might otherwise have been spared for the over-crowded galleries.

M. Formigé also constructed the transverse galleries, Rapp and Desaix, which united the two palaces of the fine arts and of the liberal arts to that of the general exposition. The latter was the work of the architect Bouvard, and was constructed, like most of the buildings, of iron. It consisted of a great number of galleries—covering a space of 105,878 square metres—some of them, for exposition, very simple and others, for circulation, somewhat larger. In the centre of the front of this building rises the great central dome, fifty-five metres in height in the interior and thirty in diameter, and, with the pavilion which supports it, one of the most criticised of the architectural features of the whole show. Certainly, from any near point of view the prodigality of ornament with which it is covered has an uneasy effect. The lofty grand entrance, all in glass, is topped with a flat arch under a gable, half-way up it carries a metal balcony, and in the centre of the arch is an immense rayed clock—for a long time the only public timepiece in the Exposition till the clamor of the Parisian journals induced the administration to set up some others. Around this portal runs an extravagant series of ornaments in metal and in terra-cotta, scrolls, wreaths, medallions, panels, heads of men and animals; under the gable is a still larger band of escutcheons bearing various coats-of-arms in color, flanked at the angles by two colossal figures and meeting in the centre two more who serve as supporters for a shield bearing the initials of the Republic. The two great pylons which frame this ornate portal are richly ornamented themselves, bear at the top immense female heads and have at their bases colossal groups of "Commerce" and "Industry."

The base of the dome is strengthened by great metal buttresses which support winged beasts bearing again



GALLERY OF FINE ART—CENTRAL ROTUNDA.



DOME OF THE PALACE OF LIBERAL ARTS—INTERIOR.

the escutcheons of the Republic; around the top of the dome runs a heavy ornament of garlanded fruits and flowers alternating with colossal heads of lions and griffins, and the immense crown which surmounts it supports M. Delaplanche's "France distributing Crowns," of repoussé zinc, nine metres tall. The base of this statue is just at the height of the top of the towers of Notre Dame.

Around the interior of this pavilion runs, at the height of ten metres, a circular gallery, access to which is had by four stairways placed in the angles of the building. From the height of the first platform the pillars are united by frontons bearing sculptured figures and painted panels typifying water, air, steam and electricity, and above is a large decorative frieze consisting of twelve panels, six metres in height, painted by MM. Lavastre and Carpezan, representing France convoking the nations of the earth to the great Exposition. Above the frieze are

four allegorical groups in sculpture, Europe, Asia, Africa and America, and the decoration is completed by panels painted with the products of these quarters of the globe. From the great gilded interior of the dome falls a flood of mellow light that is only chilled on the much-besprinkled floor far below.

In interior galleries, reached by the stairways at the angles, were placed the exhibits of tapestries of the Gobelins and of Beauvais, and on the ground floor, to right and left of the principal entrance, were the two large pieces, from the paintings of Ehrmann and Mazerolle, "The Letters, the Sciences and the Arts of Antiquity," and "La Filleule des Fées." The latter artist died during the progress of the exhibition and the administration of the Gobelins placed a yellow wreath of immortelles bearing his name at the foot of his tapestry. Behind the Ehrmann, on the eastern side, was the gallery of the Sèvres display.

From under the central dome opened the great gallery of the thirty metres, so called from its width, which traversed the French section and conducted directly to the Machinery Hall. The centre of this gallery was occupied by various important special exhibits, an archway and a fountain in enamel and mosaic, a gilded organ, the imposing display of the bronze founders, Thiébaud frères, dominated by a colossal equestrian statue of Etienne Marcel, rough cast, the beautiful little pavilion of M. Emile Gallé, of Nancy, woodwork, glassware and ceramics, a sumptuous exhibit of Lyons silks, the "Palace of Copper," erected by the Société des Métaux, and the immense and unworthy fountain group of Bartholdi. To right and left of this latter handsome winding stairways led up to a gallery in the great Hall of Machines, on a level with the huge travelling bridge in which the enterprising visitor could traverse slowly the entire length of the gigantic nave.

Returning towards the river front of the Exposition the first section to visit on issuing from the entrance under the central dome was the special exhibition of the city of Paris contained in two handsome little buildings. One of these was devoted to the service of the Direction of Public Works and the other to those of the city



HINDOO PALACE.



THE EGYPTIAN CAFÉ.

administration, such as primary education, municipal and departmental affairs, public assistance, the fire department, etc. In the first were included the municipal exhibition of fine arts, the originals of the principal works of sculpture commissioned or acquired by the city since 1878, and sketches and photographs of the paintings which decorate the *salle des Fêtes* or the *salles de mariages* of the new city halls of the *arrondissements*. There were also several of these paintings themselves, some of them admirable examples of mural decoration, and of two or three of the best we hope to give in this work colored reproductions. This section also included the engravings ordered by the city, some of the latest medals and the list of the statues of the new *Hôtel de Ville*. The statues were placed around the exteriors of the buildings, and were among the most interesting examples in the sculpture of the Exposition. The scientific and technical exhibit, in the other department, included a curiously varied and interesting collection of dissimilar objects, models showing the construction of buildings and sewers, models of healthful and unhealthful houses, fire apparatus, school furniture, statistical maps of the city, photographs of the hands of clerks, tradesmen and workpeople, with elaborate indications of the effect of the respective occupation on each, etc., etc., etc., and, finally, a very complete and beautiful model of the city on the scale of one ten-thousandth.

In front of these buildings, at the head of the basin of the luminous fountains, was the fountain group of the sculptor Contan, the largest and, on the whole, one of the most successful pieces of decoration in the whole Exposition. The author of this very important work had previously distinguished himself, he having been awarded the grand prize of 40,000 francs for the project of the monument to be erected at Versailles in commemoration of the first constituent assembly, of 1791; he was *Prix de Rome* in 1872, and given the red ribbon of the Legion of Honor in 1885. In the Luxembourg he has a marble statue of "Eros," the size of life; he executed a "Saint Christopher" for the cathedral of Notre Dame, an "Armed Peace" for the square of the avenue Trudaine, a "Woman carrying Bread" for the square Saint-Jacques, etc. Born in Paris, he was a pupil of M. Cavelier. At the distribution of awards of the Exposition M. Contan was awarded a gold medal.

The official title of his fountain was, "The City of Paris, on her barge, environed by Science, Industry,

Agriculture and Art, enlightens the world with her flambeau," and this somewhat ambitious allegory was much better carried out than allegories usually are. In the upper basin, from which the water fell in a miniature cataract into the long, lower one, was placed still another basin, dominating all, and just large enough to hold comfortably the embarkation of the city of Paris. This vessel was a handsome, high-pooped barge, sufficiently



THE STREET OF CAIRO.

practicable, terminating at the prow in the threatening head of a ram and with the Gallic cock, very spirited and very large, crowing lustily on the front. In the centre of the deck was a circular pedestal, handsomely decorated with garlands and lions' heads, and on this was erected a typical anvil, its lower outlines neatly dissembled with wreaths of immortelles. On the anvil, but comfortably provided with plenty of drapery and with a fine pair of uplifted wings, was seated the youthful figure of the city, holding her fasces, lifting high in the air her torch and

with a very cheerful and vivacious expression. On each side of her throne, on the deck, were two figures pressing forward and looking up to her,—on the right, Mercury, for commerce or industry, and a female figure for science, on the left, agriculture and art. In front of them were two reclining figures blowing long-stemmed trumpets, and four little naked boys sat on the gunwales and rested on cornucopias from which the water gushed into the basin. At the tiller of this vessel was a very handsome young woman, wearing the Phrygian cap, typifying either the Republic or the Genius of France, and looking up to the central figure while she steered with hands and knee. To the right and left the necessary evil influences had been spilled over the side of the vessel ignominiously,—on the starboard, a female figure for Routine and on the port side a goat-eared male for Ignorance.

All these figures were at least twice the size of life and executed in that ingenious combination of plaster-of-Paris stiffened with jute or some other fibrous material which enables it to resist the weather for at least six months and which the French sculptors call *staff*. For mellowness of texture and color no better substance could be desired, and it was used all over the Exposition grounds for all sorts of relief decorations. In the outer basin, surrounding the central group, were placed heroic bronze figures of naiads and boys mounted on conventional wide-mouthed dolphins which spouted streams of water, and on pedestals around the low parapet of this outer basin were erected handsome seated female figures, typifying Truth, Prosperity and other desirable properties, and who furnished from the urns at their feet fresh jets of water. In the lower basin, in the centre of the cataract and looking back over her shoulder somewhat apprehensively at the oncoming navigation above her, was a nude figure of the river Seine, seated on some rock work and holding a long oar. In the long rectangular basin in front of her were placed at intervals ornamental groups of reeds in metal from which the fountains spouted.

The spirit, cheerfulness and good decoration of the whole of this monument were something quite extraordinary. The entire group seemed alive and truly going forward in the way of progress and prosperity. The modelling of the figures was broad but very sapient; the variety and vivacity of their poses was never permitted to interfere with the general sense of harmony and decoration, and the disposition of the ornament and the accessories, though rich and abundant, was never superabundant.



ROUMANIAN CAFÉ GIRL.



TERRACE BEFORE THE PALACE OF THE
LIBERAL ARTS.

BEFORE leaving definitely the important buildings of the Champ de Mars it may be interesting to note the measures proposed to be taken with reference to their future preservation. The Municipal Council of Paris,

on the 30th of December, 1889, on the recommendation of M. Arsène Lopin, voted for the maintenance of most of these edifices, the park, the terraces and the fountains, and the government submitted to the Chambers, on the 30th of January, 1890, a law providing for this purpose and for the consequent alienation of the Champ de Mars from its former use as a ground for military manœuvres. By this law, the gallery of machinery, the central gallery of thirty metres and the great central dome are to become the property of the state; the city of Paris is to take the two palaces of the Beaux-Arts and of the Arts Libéraux, the galleries Rapp and Desaix and the central garden with the luminous fountains. In return for the parade-ground thus given up, the state will procure for the Minister of War one hundred and thirty-six acres of ground at Issy and twelve acres at Vincennes for the installation of new cavalry quarters. The land on which the Exposition buildings stand is valued at eleven millions of francs, the adaptation of the buildings and of the park and gardens is estimated at three millions more, and of these fourteen, eight will be furnished by the balance from the Exposition funds and four by the city, so that the Chambers will only be asked to vote two million francs.

On the 26th of February, 1890, the new Société Nationale des Beaux-Arts, formed by the artists who have seceded, under the lead of Meissonier, from the old Salon organization, took official possession of the Palais des Beaux-Arts in which they are to hold their first annual exhibition. To provide a commodious entrance to this new Salon, M. Alphand, the director-general of the Universal Exposition, proposes to transform the Gallery Rapp into a grand winter garden, in which is to be installed a restaurant.

The "rue du Caire," the street of Cairo, already referred to, on the western side of the general exhibition building, was one of the most popular and famous features of the great Exposition. Very considerable pains were taken by M. le baron Delort de Gléon and M. Gillet, architect, to make their copy of an Egyptian street as



THE LUMINOUS FOUNTAINS.



GREEK HOUSE.

faithful as possible, and to secure genuine natives and native ways to give the exact local color. Unfortunately, they were not able to extend this guarantee of authenticity to all of the minor wares offered for sale in these bazaars. The street itself was long, narrow, irregular and sufficiently muddy in wet weather, the buildings were as much as possible fac-similes of Cairene ones, and many of their materials, as the intricate wooden lattice-work of the upper windows, were brought directly from that city, from an old quarter which had been demolished to make room for new streets. Opposite the Moorish café, with its music and dancers, was the station of the donkeys and their blue cotton gowned attendants; farther on was a school with wide recessed bays, the façade of a mosque striped with horizontal bands of red and white simulating layers of stone-work, and a slender white minaret, said to be a faithful copy, less a story, of that of Caid-Bey, a *chef-d'œuvre* of the fifteenth century, famous for the richness of its detail. The tiled inscription over one of the doors of this minaret came from a cylinder of one of the cupolas of the original building. If the street had been somewhat narrower, so as to shut out all view of the Exposition buildings and to show less sky at top, the counterfeit would have been quite perfect. There were about forty small window shops; there were Persians, Armenians, Syrians, Jews from Jerusalem and Constantinople and plenty of Arabs; the din of the music was heard continually. The throng of European visitors was sometimes too great for exact proportion, even for a street in Cairo, and there was so much buying of articles of dubious value that the authorities were forced to interfere repeatedly, especially towards the end of the Exposition, and in some cases to close up the shops of the offenders. For, sad as it may seem, a great deal of Oriental merchandise is not Oriental at all—"all the Algeria of Fromentin—except the sky and not excepting the turbans and tarbouch, all the Morocco of Delacroix excepting the people, was made in Paris proper." Some of the condiments offered, however, seemed to be genuine; the minute portions of black coffee served in the cafés were very like the Eastern article and were very good; the *hallouah* and the *baklough* were less inviting and much less well patronized. The first is said to be made of seramum seeds crushed in sugar, and the second of almond paste fried in oil. A great variety of sirops and other beverages, of various bright colors and various degrees of deadliness, were offered for sale all over the Exposition grounds and freely partaken of by the thirsty Parisian crowd,—which always manifests a weird taste for certain chemical-looking preparations.

In the rue du Caire and the Esplanade des Invalides there were no less than seven concerts—Egyptian, Moorish, Algerian or Tunisian—open to the public, all more or less alike and all well patronized. The orchestration in all these resorts was of the peculiarly barbaric Eastern kind, so trying to Western ears, and in them all might be seen with variations the famous "Danse du Ventre," the stomach dance—very well named. The dancers, male and female, were generally seated in a row on a low platform which faced the audience, with the musicians either behind them or at the sides. In the Moorish café on the Esplanade there were many more of these dancers, Jewish and Mussulman, than in the principal one of the rue du Caire, but the latter was rather

more select and agreeable. A tall, smooth-faced young Turk, of a good *café-au-lait* complexion, stood at the door of the latter pavilion and solicited custom in fair French; an elderly attendant in white, with thin black arms, served the little cups of black coffee within. The audience were seated on commonplace European chairs, but on the dais all was pure Orient. The performances were repeated at short intervals throughout the day, the dancers succeeding each other; if the visitor happened to arrive in one of these intervals he was promptly served with coffee and amused himself while waiting by staring at his entertainers. Probably one of the latter rolled himself, or herself, a cigarette and proceeded to smoke it with an impassive countenance; presently the musicians commenced to shrill and to drum, and one of the dervishes gravely rose, stepped out of his slippers and came to the front of the stage. He wore a long white cotton or muslin skirt, very full, tight white pantaloons and a red fez. Making a pivot of one of his bare feet he proceeded to turn himself around it to an incredible degree, and by rapidly repeating this movement he continued to spin round and round, always in the same direction, till his skirts stood out horizontally and the dazed spectator grew giddy watching him. Finally he ran down, like a top, resumed his slippers and his seat, without any heightening of his complexion and his place was taken by one of the female performers, generally, in the café in the rue du Caire, by the younger and better looking one. Her successor was a plump, middle-aged woman, who was the most expert of all the dancers "du ventre" of the Exposition, and whose ability to agitate certain portions of her body was truly surprising. Beginning with her head and neck, and always keeping some kind of time with the music, she slid them round and round an invisible circular turn-table at the bottom of the neck; then with her breasts, agitating first one, then the other, then both together under her loose jacket, then the motion descended to her abdomen, which took on a very remarkable capacity for independent action, and finally to her hips. It was not surprising that one of these performers at the Exposition was carried off to the hospitals during the summer, very sick with peritonitis. The plump and matronly dancer of the rue du Caire came from Esneh, famous for its almehs and where Flaubert, the novelist, met that Ruchouk-Hanem who produced so profound an impression upon him. As a spectacle, this performance was interesting, at least for the first time, but the æsthetic element was quite wanting, and even the costumes of the dancers, especially when there were many of them together, were apt to run into crude and discordant colors and to a general bagginess of aspect which the skilful painters of Oriental themes, like Gérôme, have had much pains to correct.

There were certain variations to these dances in some of the cafés. In one of them a young almeh of Tangiers, Mlle. Zahra, executed a sword-dance, placing against her throat or her chest the points of two yataghans and making, thus endangered, the most perilous leaps and steps; then she made the weapons twirl round her head in the most rapid *moulinets*. In the Algerian concert there was a Mlle. Torkia who rivalled her in this exercise; in another place the Druses of Mount Lebanon delivered some apparently terrible sabre combats. And there were also some members of the Algerian tribe of Aissaouas, who furnished some unpleasant feats of apparent self-torture in imitation of their religious ceremonies.

AMONG the most picturesque and satisfactory of the various national restaurants was that of Roumania, established at the entrance of the rue du Caire in a very decorative little chalet, a large part of it an open gallery, said to be an exact reproduction of a country-house of that principality, with its gable, its tower and its high roof. In the interior was a platform, reached by several steps, generally reserved for particular guests, and with the kitchen backing up against it in a corner. The orchestra—which played from morning to night, and, after the Exposition closed, transported itself to a restaurant in the avenue de l'Opéra—was led by a chief who, however, did not concern himself to beat time, but fiddled assiduously, generally standing. The costume was asserted to be that of the Roumanian peasant, white linen, embroidered on the border with red, large sleeves to the jackets and very European-looking shirts. The string instruments were bass-viol, violin, zither and mandolin, and there was a sort of Pau's pipe, called *nae*, performed upon by an artist who precipitated himself from one mouthpiece to another with singular contortions of visage. Much of the music was a sort of languorous waltz, and the musicians were dark, black-haired men who might be accepted as Bashi-Bazouks or gipsies. The young girls who presided at a sort of high bar and sold native prune brandy—said to be very drinkable—were, however, much prettier to see, and one of them, in particular, was famed as far as the Invalides for her beauty. Their white costumes,

covered with embroidery, set them off to the utmost advantage, and one of the chroniclers of the Exposition relates that "one of our most distinguished men in the political world became so enthusiastic the other day as to take in his arms and embrace cordially, *coram populo*, one of these Hebes. But what would you have: man is so weak! . . ."

In addition to the *tsnica*, or prune brandy, there was a wine much like muscatel called *tarnoiasa*, and for viands, a tartish soup, *borsch*, much in favor with the Russians, *fleica*, or native beefsteaks, *frigarins*, or fillets of beef grilled on a spit, etc. The majority of the guests, however, wisely confined themselves to better-known French dishes, which were very well served but sufficiently high-priced.

M. GARNIER'S "History of Human Habitation," illustrated by forty-four models representing the dwellings of all ages, stretched along the quai d'Orsay and the quai de Grenelle, on each side of the bridge of Jena, and afforded much amusement to the savants. The architectural public, trusting the high authority of the builder of the Grand Opera House, accepted these handsome and interesting little constructions as veritable pages



BYZANTINE BUILDING.

of history, and were much shocked to learn later that the architecture was arbitrary, and the archæology all wrong. Yet this was understood to be the opinion of the authorities, and the comic artists even took hold of the proposition and amused themselves by figuring M. Garnier procuring his knowledge by various impossible but picturesque methods. Great things were promised of this series of buildings before the Exposition opened—and the conception was certainly one of the cleverest that this great opportunity brought to light—but it was probably found impossible to carry it out in a completely satisfactory manner. It was announced, for instance, that the various dwellings would be occupied by inhabitants in the appropriate costumes and appearances, and engaged in the appropriate domestic occupations, but this was, naturally, only done in a very incomplete fashion. The few natives that were to be found in their respective mansions were much more interested in selling their wares—generally frankly Parisian—than in keeping up any proper histrionic conception.

M. Garnier's arrangement of his forty-four buildings was even objected to as being unnecessarily confusing. His series began, rightly enough, on the eastern side of the bridge with the primitive habitations of the pre-historic man, the Troglodytes, consisting merely of a rough cavern partly hollowed in an immense piece of artificial rock-work and with a few branches of trees piled up around the opening to keep off the wind. To these

succeeded the slightly more advanced caverns and grottoes of the Age of Stone and the Lacustrian houses built on piles in an artificial piece of water. In the second section, divided into three classes, he placed first the habitations of "the primitive civilizations," Egyptian, Assyrian, Phœnician, those of the Israelites, those of the Pelasgi and those of the Etruscans; then followed those marked by the Aryan influences, the Hindu, the Persian, the German, the Gauls, the Greeks and the Romans, and, finally, those of the period which followed the invasions of the barbarians, the buildings of the Huns, the Gallo-Roman, the Scandinavian, the Renaissance, the Byzantine, the Slave, the Arab, the Soudanese. As will be seen, if the chronology is kept, the history and the geography are somewhat confused.

The architecture of the third section M. Garnier lumped together under the general title of "Isolated Civilizations." This included those races, barbarous or civilized, which "have rested isolated from the rest of the world, and have not participated in the general advance of humanity,"—the yellow race, including the Chinese and Japanese, the negro and the native tribes of the American continent.

All these very varied edifices were given with the same assurance, whether it was those of the Greeks and Romans, of which our knowledge is full and complete, or those of the earlier civilizations of which it is exceedingly fragmentary. The small size of all the buildings, moreover, contributed greatly to raise doubts in the minds of the visitors as to the exactness of the fac-simile. The Egyptian palace was decorated with very fair imitations of the bright colored mural paintings which the monuments show us, and in the earlier days of the Exposition the artists, in conventional blue blouses, might be seen reproducing the work of their dead and gone fellow-craftsmen of the times of the Pharaohs. The Assyrian palace, according to M. Garnier, consisted of two white square towers, one considerably larger than the other and connected by a very small wing; the Phœnician was a light but lofty wooden structure, rising on a basement of stone pierced with narrow openings, the upper portion painted in lively colors, and furnished with large window openings protected by blinds. To this it was objected that the recent discoveries on the site of Nineveh and elsewhere seemed to demonstrate that in these warm countries the buildings were always low, dark and constructed with very thick walls. To keep out the heat, the light was also excluded. At Nineveh the walls were seven and eight yards thick and, according to M. Perrot, an authority, there have never been found any traces of a stairway leading to an upper story. M. Garnier would probably reply that these buildings were mostly constructed of brick and that all traces of the stairways and the upper stories would naturally disappear in the course of the centuries. It was also maintained by the critics that the winged globe which this restorer had put upon the front of the Assyrian building properly belonged to the Egyptians, who had invented it, and that, *per contra*, he had taken from the Assyrians the cupola—to which they were entitled as having given it its first form—and bestowed it upon the Persians, who had only borrowed it from their neighbors.

In the Egyptian building were installed, a portion of the time, two natives, from the Upper Nile, who offered for sale objects said to have been found during the excavations made for the Boulak Museum. The Hebrew



EGYPTIAN DWELLING.



ANCIENT TOWER

dwelling was distinguished by its doorway in the shape of a triangle with the top cut off, supposed to be a reminiscence of the sojourn in Egypt; the Pelasgian was simple and the Etruscan handsome, supported on three columns and having a roof somewhat like a wide basket turned upside down. The Hindn palace, as shown in our cut, consisted of two towers of three stories each, some sixty feet high, and with so small a proportion of façade between them that they were compared to an immense opera-glass. After the Persian building came those of the Germans and Gauls,—sort of huts covered with thatch or straw or thick oaken planks, and, in contrast with these, the Greek house, the Gallo-Roman, and the moving habitation of the Huns, the primitive wagon furnished with curtains.

On the other side of the bridge of Jena, descending the river, was the Scandinavian chalet, built of beams of wood like a log-house, and with the interior of a Norwegian fisher's dwelling. Next it came the handsome Roman building with its large round arch on the first floor, its narrow windows and, above, a large wooden balcony; the mediæval mansion with its roof with two pitches, its large arched doorway and the gable of timber-work, that “‘gable on the street,’ of which the bourgeois were so proud and which may be found still in some of the towns of Alsace.” This group was terminated by the elegant Renaissance pavilion, with its handsome little tower on the angle, and which was destined for the use of the President of the Republic when he visited the Champ de Mars.

The Renaissance and the Byzantine buildings are shown in the illustration, the latter with its two large open balconies and its heavy columns. In strong contrast with this were the Slave and the Russian dwellings, constructed entirely of wood and light in design, if not graceful. The latter was supposed to be inhabited by a family of Moujiks, and the former by some Bulgarians from Késanlik, who distilled attar of roses. The walls of the Arab building were covered with white plaster, there was a square tower ornamented with heavy columns and with lattice-work wooden windows, all said to be of the eleventh century, but it was averred that the columns were entirely wrong and that the painting of the trellis-work of the window balconies was a barbarism. The

type of the Soudan was a sort of mausoleum, low and severe in style, with inclined angles, a low doorway and no windows. The Chinese and Japanese were much more cheerful and constructed of open-work wood-work; but it was again complained that M. Garnier's painting of the interior walls in oil was in direct opposition to the Japanese method of using only the natural woods, oiled or polished. This section, the "isolated civilizations," was completed by the huts and cabins of the Laplanders, the Esquimaux, some of the negro races and the North American Indians, and the much higher-in-the-scale palaces of the Aztecs and the Incas, shown in the illustration, and in which were seen certain affinities with the Egyptian architecture.

THE crowd of visitors which thronged everywhere was not one of the least interesting sights of the Exposition, but the glowing descriptions of the newspaper writers and the clever imaginings of the Parisian critics were not to be taken too literally. While there was a very considerable variety of human types among the multitudes of sight-seers, the withering influence of the black European coat has penetrated even to the farthest Orient, and the visitor from the realms of Prester John and Cathay endeavored to render himself, in speech and apparel, as



EVENING ON THE ESPLANADE DES INVALIDES.

much as possible like the undistinguished Parisian citizen. The divers nationalities betrayed themselves on close inspection by certain variations of complexion and feature, by the greater or less purity of their accent; there were certain slight perceptible grades of costliness in the male garments and still greater ones in those of the feminine element, but no one wore either his best or his worst, and even the fine test of the red covered "Baedeker" was not here to designate the inquiring tourist. And the French tongue was overwhelmingly in the majority—excepting on the platforms of the Eiffel Tower, where, for some reason, there was a good deal of English, and in some of the foreign cafés, there was scarcely anything else to be heard. The restaurants furnished a certain sort of classification,—the selecter diners who took their repasts at the higher-priced places contemplated with a mild sense of superiority the pushing crowds that blocked up the doorways of the Duval establishments and even formed in lines on the adjacent walks, waiting their chance to enter; and these, in turn, considered themselves to move in a somewhat higher social sphere than those who took their meals frankly from newspaper bundles, seated in the chairs or on the grass in the open. A very lively business was done with these humbler citizens by the numerous gingerbread and sirop booths within the enclosure and by a row of enterprising merchants who set up their establishments along the quays and sold eatables and drinkables through the openings between



THE STREET OF CAIRO.

the uprights of the barriers. As everywhere, it was these candid-souled visitors who made themselves most interesting by most frankly betraying their respective emotions, and, as a bit of local color, we give the translation of this overheard dialogue, reported by a sprightly Parisienne who is supposed to be visiting the great show on the arm of her husband, and who gets into print through the medium of M. Gaston Jollivet. The speakers are a small family group of provincials who have lost some of their friends for the moment, and who naturally "tutoient" each other.

"I say to thee that it was Eusebius who left us in the Gallery of Machines, under the pretense of showing to Clara the apparatus for making English bonbons."

"Oh, well! He will come back, Eusebius. Don't get into a fret about him."

"He will come back? where? For sure not over that bridge, with the millions and millions of people that are on it. How provoking it is!"

"As to that, it is rather provoking," insinuated a third voice, that of a woman, which seemed to me to be slyly perfidious, "because in fact—if Eusebius goes off like that for so long a time—with Clara.—What do you think about it, Anatole?"

"Here came in the voice of Anatole.

"What I think about it—what I think about it," grumbled Anatole, "is, that if there were no one but me to marry her, Clara, the sugar candies when her children are baptized would never give you the dyspepsia."

"Anatole had not yet finished when there was a cry of joy from the others,—Eusebius and Clara were found. They came up, flustered and out of breath, protesting volubly that they had been separated by the crowd, that the attendants had directed them wrongly, that they had gotten on the wrong path. And pa-ta-ti, and pa-ta-ta! Whereupon the whole party went off, arm in arm, but it seemed to me that Anatole was grumbling still, at the last turning."

AMONG the many highly civilized appliances which brought Eusebius and Clara to "stand at gaze" few seemed to them much more unnecessarily elaborate than the scientific apparatus for baths, filters, hand-basins and other perfected plumbing which was exhibited in divers localities and especially in the very handsome little white "Palace of Hygiene," which stood next that of the Minister of War. Here might be seen the latest modern improvements in that domestic art which is so generally conspicuous by its absence in French houses, and which in the rural districts is a quite unknown quantity. Among these honest provincials the bath is generally considered a serious remedy, to be used only in extreme cases, and a chronicler records that when the novelist, Guy de Maupassant, added a bath-room to his villa at Etretat—which is an unusually enlightened locality, being much used to the presence of visitors from the cities in summer—the natives shook their heads in commiseration,—
"Would you have believed it! That poor M. Guy! And yet he looks so healthy."

This, however, is the legacy of the picturesque but much-unwashed Middle Ages. The average Roman citizen had more quarts of water for his daily use, and of a better quality, than the average Parisian.

One of the rooms in this Palace of Hygiene was devoted to the department of public assistance, in the department of the Minister of the Interior, and contained a great variety of instruments and apparatus for the care of the sick. A very amusing section of this division was that pertaining to the cradles of all ages, each with its baby in wax carefully swaddled and put away in the correct manner, some in baskets, some in hammocks, some hung on the wall to be out of the way. There were also a variety of movable supports for the encouragement of very young pedestrians, and a fac-simile of the ancient tower of the hospital of the Madeleine for abandoned infants, 1730, shown in the illustration. The visitors passing amused themselves by pulling the handle of the bell, and the wicket still revolved, with its model of a child wrapped in the shawl of the heartless, or the despairing, mother. Farther on, a register in a case demonstrated the formalities that were observed in order to identify the infant in case the negligent parent afterwards came to claim it.

THE detached buildings of the various Central and South American States were clustered together fraternally in the corner of the Champ de Mars to the west of the Eiffel Tower and to the north and west of the Palace of the Liberal Arts, and were handsome and diverting little edifices every one, though that of Mexico was



PALACES OF THE AZTECS AND OF THE INCAS.

the only one whose architecture could be considered strictly national. That of Nicaragua, shown in the illustration, was a picturesque wooden chalet, constructed by M. Sanvestre, and notable for containing a model in relief of the inter-oceanic canal, on which work has been commenced by the American engineers and of which the completion is announced for 1895,—an announcement over which the French visitors, mindful of their own Panama enterprise, shook their heads ruefully and muttered, “Nous verrons bien.” The pavilion of San Salvador was a beautiful square little edifice, its lower windows protected by graceful iron-work and its upper ones opening on square little balconies, the principal defect being in the situation, which prevented the visitor from backing off to a suitable distance to admire the effect as a whole. The architect was M. J. Lequeux, of Paris, and he had added to the simple lines of his building, on the angles and friezes, a curious decoration in tiles, representing the Mexican signs for the eighteen months of the year and the twenty days of each month, and the series of Mexican kings. The contents of the building were the usual coffee, leathers, minerals and indigo and, in addition, models of the principal monuments of the country, a fearful state bedstead, some native paintings, guitars and mandolins and a very handsome table of different woods incrustated with silver coins. The picturesque wooden chalet which contained the exhibit of Guatemala was neatly decorated on the exterior walls with what seemed to be enamelled patterns but which was in reality only Lincrusta-Walton. In the interior was a large display of the products of the country, including a fine assortment of tapirs and a bewildering arrangement of humming-birds and coleopterous insects.

Honduras and Hayti faced each other in two very modest exhibits a little farther down the side of the Palace of the Arts Libéraux; Costa Rica, very late in moving in, occupied a portion of a building which a French exhibit had forfeited, and San Domingo—making her first appearance in an international exhibition—had a little chalet with a red roof, between Paraguay and Uruguay. The latter resembled so strongly in the blue and terracotta of its architecture its imposing neighbor of the Liberal Arts that it needed the national flag above its roof to maintain its individuality. Like the Argentine Republic, the principal productions of the country are horned cattle, and the feature of the exhibit was the display of the *saladeros* of Fray-Bentos, manufactory of beef extract, system Liebig, in which a thousand bullocks are slain a day and six hundred persons employed. There were also extraordinary fleeces in the wool exhibit, and some glasses containing *tasajo*, sun-dried and salted beef, which the Republic formerly exported in great quantities to Brazil and Havana for the use of the slaves, but which the enfranchised blacks now refuse to touch. The little exhibit of the Republic, however, was not confined to these grosser products; in the lower story of the building—which it was intended to transport to Montevideo—there were displayed a number of documents relating to the public instruction, the arts and sciences of the country, a

collection of local journals and a number of paintings, nearly all of them signed by Mme. Urbana Samaran and including copies from Rembrandt, Ribera and Franz Hals.

The Republic of Paraguay, according to a French statistician, has an extent nearly equal to that of France and a population about that of the Batignolles-Montmartre quarter of Paris. Its Exposition chalet was composed of three movable structures, two on the ground floor and the third, the *mirador*, forming a sort of lookout from which the inhabitants formerly kept watch for the roving bands of Indian pillagers. The exhibits included the various products of an agricultural country, among them good tobacco and an excellent tea, *yerba maté*, exported all over South America. There was also some *nandouty*, a fine lace made by the native women.

The largest and finest of all the South American buildings was that of the Argentine Republic, separated from the "History of Habitation" only by the little Decauville railroad. It was the work of the architect, M. Ballu, and was to be taken down and transported to Buenos Ayres, there to be set up again as the "Palace of the Expositions." The principal façade was decorated with a large group in sculpture, by M. Hugues, representing the republic leaning on a bull and having at her side a laborer and a smith, and by two large mosaics executed from designs by MM. Barrias and Roll. The summits of the four square towers at the corners bore large figures of Fame, by M. E. Barrias. In the interior, in the pendentives of the central dome were paintings by Gervex, Besnard, Cormon, Luc-Olivier Merson, Tony Robert-Fleury, Leroux and other distinguished French artists, and under the immense window, blazoned with the national colors, were placed bronzes by Turcan, Charles Gautier and others. A peculiarity of the exterior decoration was the studding of the walls with innumerable bulbs of colored glass, like immense jewels in the rough, and in the evenings each of these jewels was illuminated from the inside by a brilliant point of electric light. A great variety of the productions of the country, natural and artificial, constituted the exhibit made by the republic.

Just behind this building, between it and the little lake which lay to the west of the Eiffel Tower, was the much smaller edifice representing Brazil, but which was flanked by a magnificent hot-house filled with specimens of the tropical vegetation, including the *Victoria regia* in a basin of water duly warmed. The Brazilian palace was constructed by a Parisian architect, M. Danvergne, whose design carried off the prize at the competition opened by the Brazilian committee. The main body of the building was square, or nearly so, pierced with large



THE BUILDING OF NICARAGUA.

bays, ornamented with very ornate beaks of galleys and with life-size statues of the principal rivers of the country. At one angle rose a square tower, terminating in a belfry, and at another, the terrestrial globe, the official emblem of the former empire. Inside the building was the usual variety of agricultural products, timber, minerals, manufactures, etc., etc. The Mexican building, to the west of that of the Argentine Republic, as has been observed,

was the only one of all these Spanish-American ones which preserved the national architecture. M. Antonio Anza, the constructor, had worked conscientiously from authentic models, and his edifice was certainly one of the strangest and most foreign-looking in the whole Exposition. The

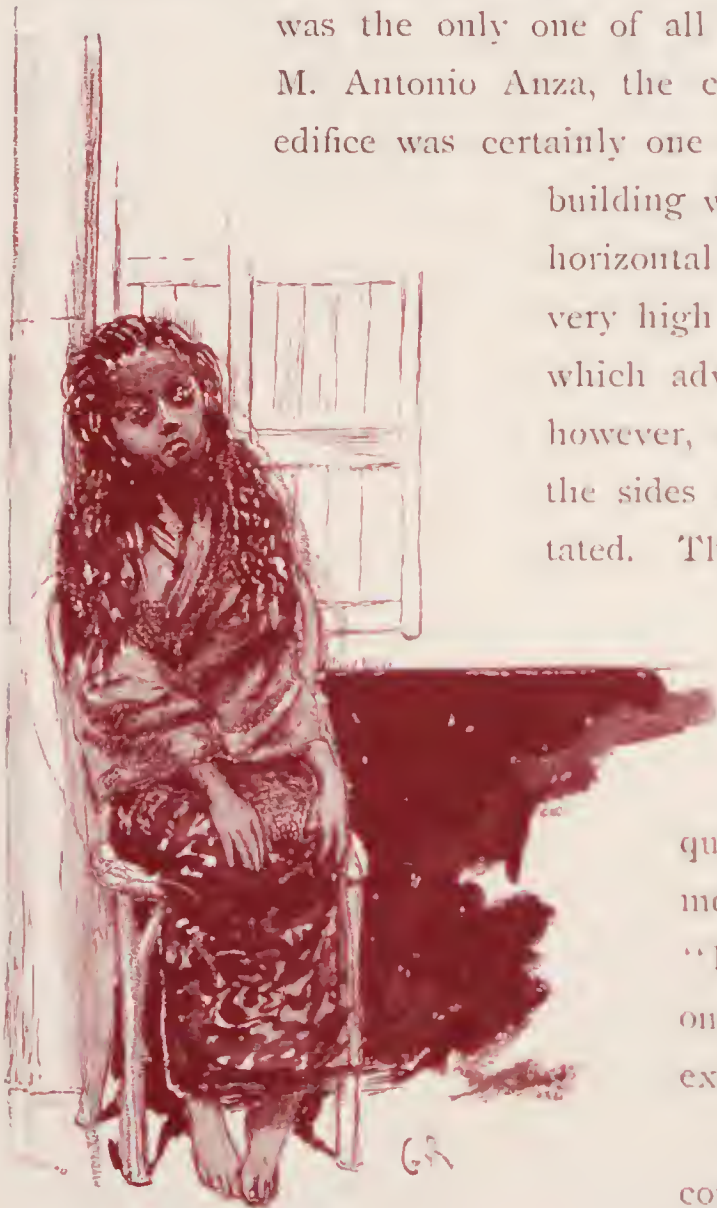
building was long and only two stories high, the lower one being striped with long horizontal bands reproducing native patterns, and the upper one bearing panels in very high relief of strange figures, gods, kings and heroes. The central pavilion, which advanced a little, was approached by a lofty flight of stairs, so very steep, however, and the steps so narrow that no one could mount, and this represented the sides of the ancient *teocallis*, down which the sacrificial victims were precipitated. The walls were of iron and sheet-iron and the decorations in zinc repoussé,

all from the famous Cail metal works, and the entire building was to be taken down and transported to Mexico. It was entered by two doorways, one in each of the lateral wings. In addition to the natural productions of the country there were exhibited a number of mannequins of the native types, some very handsome saddles and sombreros, a model of a ship-canal, a statue erected by the republic to Miguel Hidalgo, "Father of his Country," a reproduction of a monument to Quauhtémoc, one of the native heroes in the struggle against Cortes, and casts of some extraordinary aerolites which had fallen on the territory of the republic.

Next to the Mexican building, and offering the strongest possible contrast to its sombre strangeness, was the little white rococo pavilion of Venezuela, style Louis XV. at its most fantastic, which found its *raison d'être* in the fact that the Spaniards left numerous specimens of this style

of architecture behind them in the countries they colonized. The main entrance, which carried its flourishes and trophies far above the lines of the eaves, was said to be founded upon that of the cathedral of Caraccas. To vary the creamy whiteness of this overloaded little edifice, the architect, M. Paulin, had added a porch in the national colors, yellow, red and blue, under which was arranged the exhibit of the gold mines of the State of Yuruary and a glittering gilded pyramid to demonstrate the amount of their yield from 1871 to 1888—twenty-four millions of dollars. Near this was a collection of native Indian skulls, a model of a necropolis of the Colombian tribes, a bark sarcophagus, a crown of jaguar claws, native arms, etc., and, in addition to the cocoas, coffees, woods and sugar-canes, a model of the statue erected to Bolivar on the battle-field of Boyaca.

The Chilean building was situated in the corner behind Venezuela, and that of Bolivia at one side of it. The former was a solid rectangular edifice, constructed of iron and beton, painted in quiet colors, and which was to be taken down and transported to Santiago where it is to serve as a museum for the *Quinta Normal*, a sort of horticultural garden. The contents were not more interesting than the exterior, and consisted chiefly of natural products and of some examples of the native art, which is not much more than a weak imitation of the French, the Academy of Santiago sending its best pupils to Paris, equipped with an annual pension of fifteen hundred piastres. The Bolivian building was an economical structure in wood and plaster, which was to be demolished at the close of the Exposition and which consisted principally of four lofty square towers, having a lower, arched gable between them on each side, the whole striped with horizontal bands in black and white, and the main entrance through a porch with spiral columns. In the centre rose a dome, some forty feet in diameter. In the interior was a large collection of specimens of native minerals, the reproduction of the gallery of a silver mine, skins of *vigonias*, *chinchillas* and *lanas*, enormous lumps of caoutchouc, etc., etc. The gray rectangular little building erected by Ecuador was near the south pillar of the Eiffel Tower, and was a reproduction of a temple of the Sun, time of the Incas. The frieze was decorated with bas-reliefs for which the casts were taken in the



TOO MUCH CANDY!

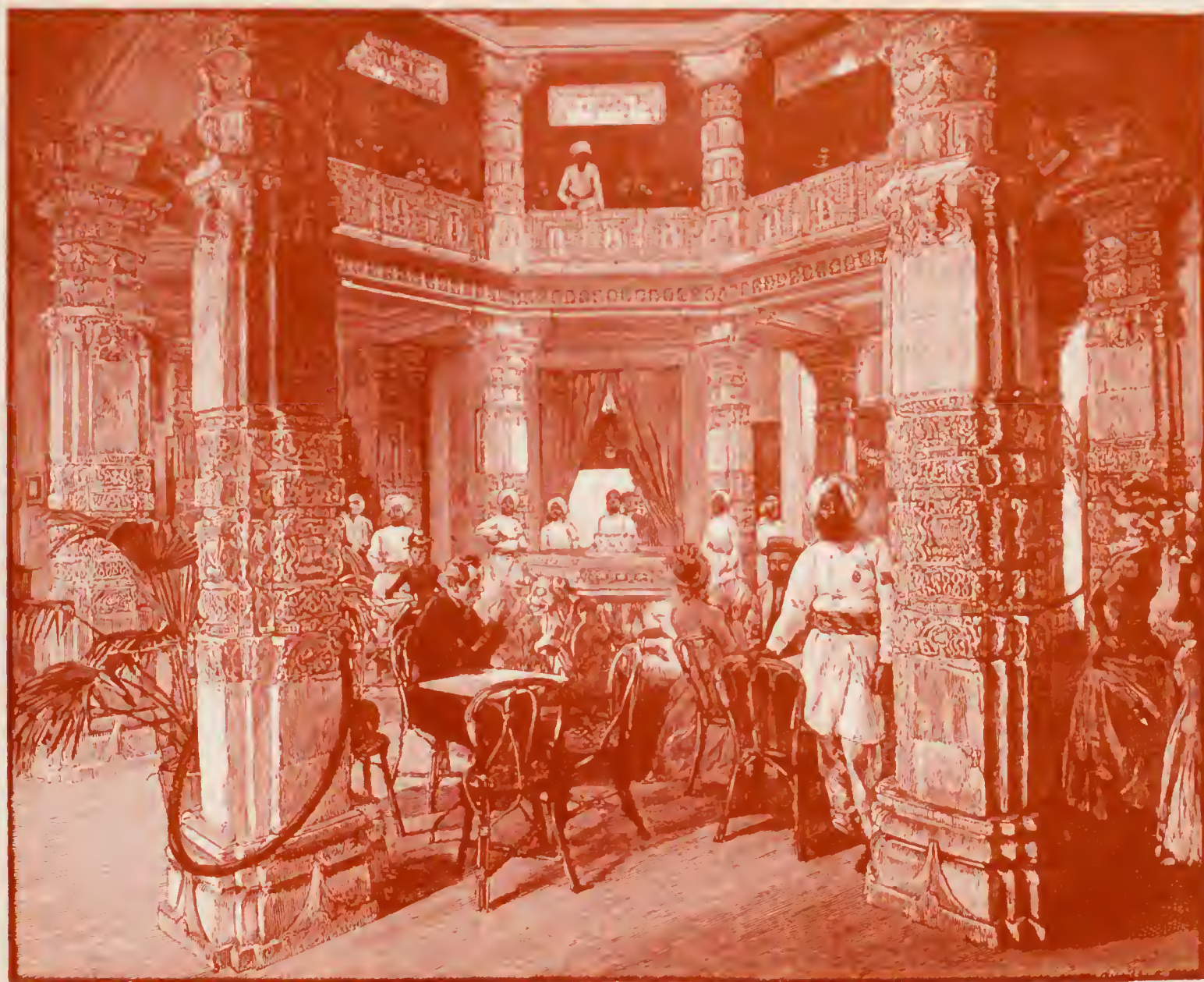


FAÇADE OF THE PALACE OF GREECE.

ethnographical museum of the Trocadéro, and the entrance and the angles of the basement were guarded by strange-looking embryo turtles in gray stone, as large as calves. In the interior was a collection of native stone weapons, rock crystals, straw hats, and one of those peculiar products of the country—the head of an Indian warrior reduced to the size of a fist, without disturbing the equanimity of his expression or the abundance of his rich, black hair. There was also a placard, mounted on the wall above a view of the city of Quito, in which some patriotic citizen, vexed, without doubt, at the dwarfing of this building by its towering neighbor, took occasion to remind the spectator that the national capital was situated 3000 metres above the level of the sea, ten times higher than the Eiffel Tower!

AMONG the innumerable curious and interesting minor exhibits of the Exposition was that of the model of the earth, contained in a building situated in the corner between Chili, Uruguay and the angle of the Palace of the Liberal Arts. This model was constructed on a scale of one-millionth, covered with sections of pasteboard, to the number of five hundred and eighty, which were carefully modelled in seas, continents and islands. The diameter of the sphere was twelve metres, six hundred and thirty-six millimetres, and it revolved on its own axis by means of an ingenious mechanism placed in the lower part. A spiral stairway permitted the visitor to mount to the upper portion, and certain geographical and astronomical conferences were held around it on certain days.

ON the other side of the Eiffel Tower, almost underneath it, was the little building containing the offices of that lofty institution and a particular little exhibition all of M. Eiffel's own. Here were shown the reproductions in miniature of the two important engineering works by which he had won his spurs before he set up his tower in Paris, the locks of the Panama canal and the viaduct of Garabit. The latter is situated on the railway line between Neussargues and Marvejols, and spans a torrent at the bottom of a gorge so deep that when the young engineer proposed to throw a bridge over it he was laughed at. However, he persevered, and succeeded. The total length of the construction is five hundred and sixty-four metres, the metallic part being four hundred



CENTRAL ROTUNDA OF THE INDIAN PALACE.



INTERIOR OF THE IMPERIAL PAVILION OF MOROCCO.

and fifty, the length of the gigantic arch that leaps the chasm is one hundred and sixty-five metres, and the height of the roadbed above the level of the stream, one hundred and twenty-two. The weight of metal employed in this work is nearly 3,500,000 kilogrammes, and on a separate plan the height of the arch was shown by placing underneath it the towers of Notre Dame surmounted by the column Vendôme and with space to spare. It was the construction of the supports of this lofty structure that suggested to M. Eiffel the idea of his tower of three hundred metres. "After all," he has said, "my tower is only a pier, like others. If I had another of the same height on the other side of the Seine, we might have a fine bridge." The models of the Panama locks were almost equally interesting, they were constructed on a scale of one-fiftieth and showed the different basins, rising one above another, and separated by metallic sluice-gates operated by the force of the water. The difference in the level of locks usually employed on canals seldom exceeds four or five metres, while in these a difference of twenty metres was provided for. In one of these basins floated tranquilly an admirable model of an ocean steamer, of the type of *La Bourgogne*, also reduced to one-fiftieth, and a marvel of delicate workmanship, three metres in length.

"In 1885," said M. Eiffel, explaining the genesis of his tower, "we were engaged, my engineers and myself, in the study of the questions connected with the construction of lofty metallic piles supporting railway viaducts, like that of Garabit, for example. Our experience led us to believe that a much greater height could be given to these piles than was usually done. The very highest, in fact, do not exceed seventy metres. Confident in our deductions we made our calculations for a pier of a viaduct of one hundred and twenty metres of elevation and forty metres of base. From the solution of this problem was evolved the idea of the tower of iron, of which the first sketch was prepared by two of my principal collaborators, MM. Nougier and Kœchlin, engineers of my establishment, and by M. Sauvestre, architect.

"The conception of these pylons rests upon a method of construction which is peculiarly my own. Instead of uniting the angles of the pyramid by diagonal braces, as is usually done, we give these angles such a curvature that the pyramid is enabled to resist the transverse action of the wind. This is the reason that the tower has been built in the form of a pyramid with the four angles curved, isolated from each other and united simply by the beams forming the platforms of the various stories. It is only towards the top, where the angles come sufficiently close together, that the ordinary diagonals are used. The edifice, thus constructed, has nothing to

fear from the efforts of the tempests. A commission, appointed in June, 1886, by M. Lockroy, then Minister of Commerce and Industry, accepted the plans that I presented and, on the 8th of January, 1887, the contract with the State and with the city of Paris for the construction of the tower was signed. Twenty days later, the work commenced."

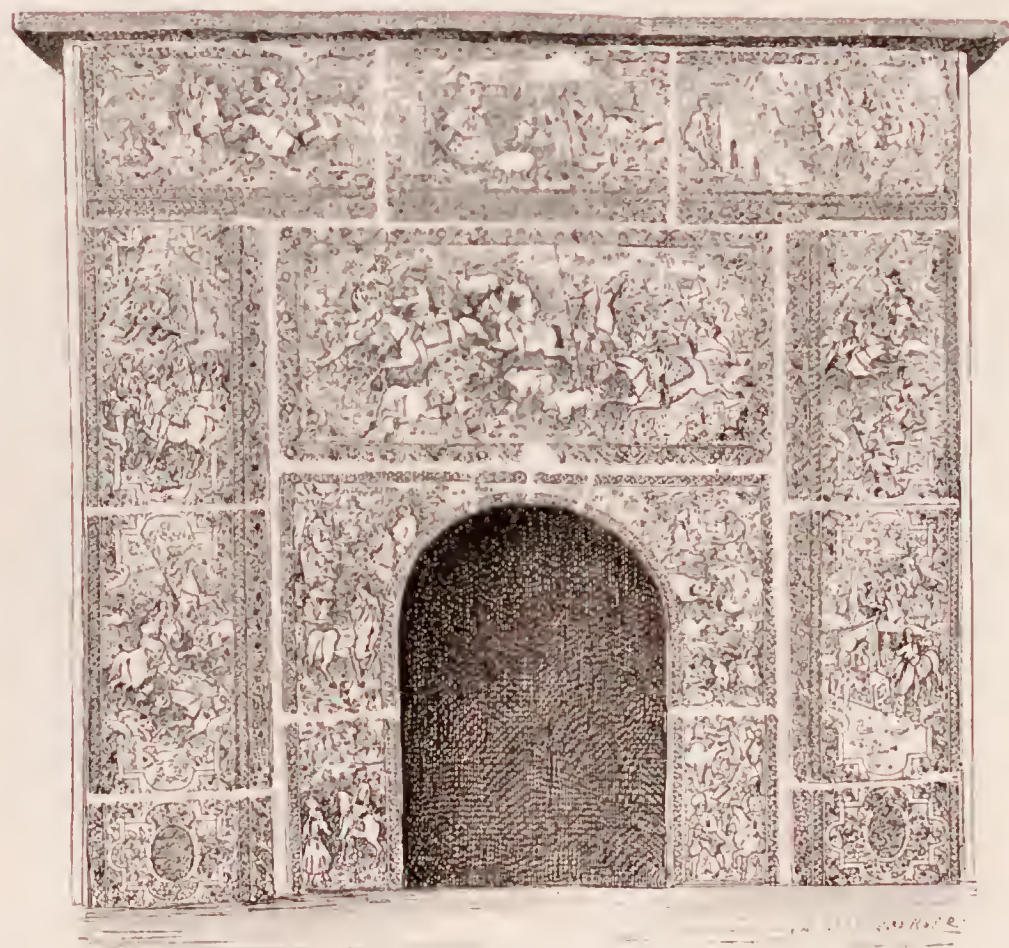
The chorus of protestations that assailed this project is a part of the history of the Exposition. The engineers declared that the structure was a mechanical impossibility, that neither the iron nor the foundations would support the weight, and that, if they did, the soil certainly would not. Then the proprietors of the adjoining localities threatened legal proceedings to indemnify themselves in enormous sums for the danger with which their properties were menaced by the tower; and, finally, the painters, the poets and the dramatic authors presented a formal protest to M. Lockroy, demanding his official opposition to the project and declaring the edifice to be "the dishonor of Paris." The minister's reply has been recorded;—he regretted that the contracts had all been signed and that, consequently, it was too late to save from profanation "that incomparable square of sand, known as the Champ de Mars, so worthy of inspiring poets and of seducing landscape painters." Even the Academician Coppée is said to have apostrophized M. Eiffel's edifice in verse, somewhat to the following effect:—

"The young man-about-town considers
The hundred stories so high
Of this cloud-scraping pharos
Says to himself, 'For Why?

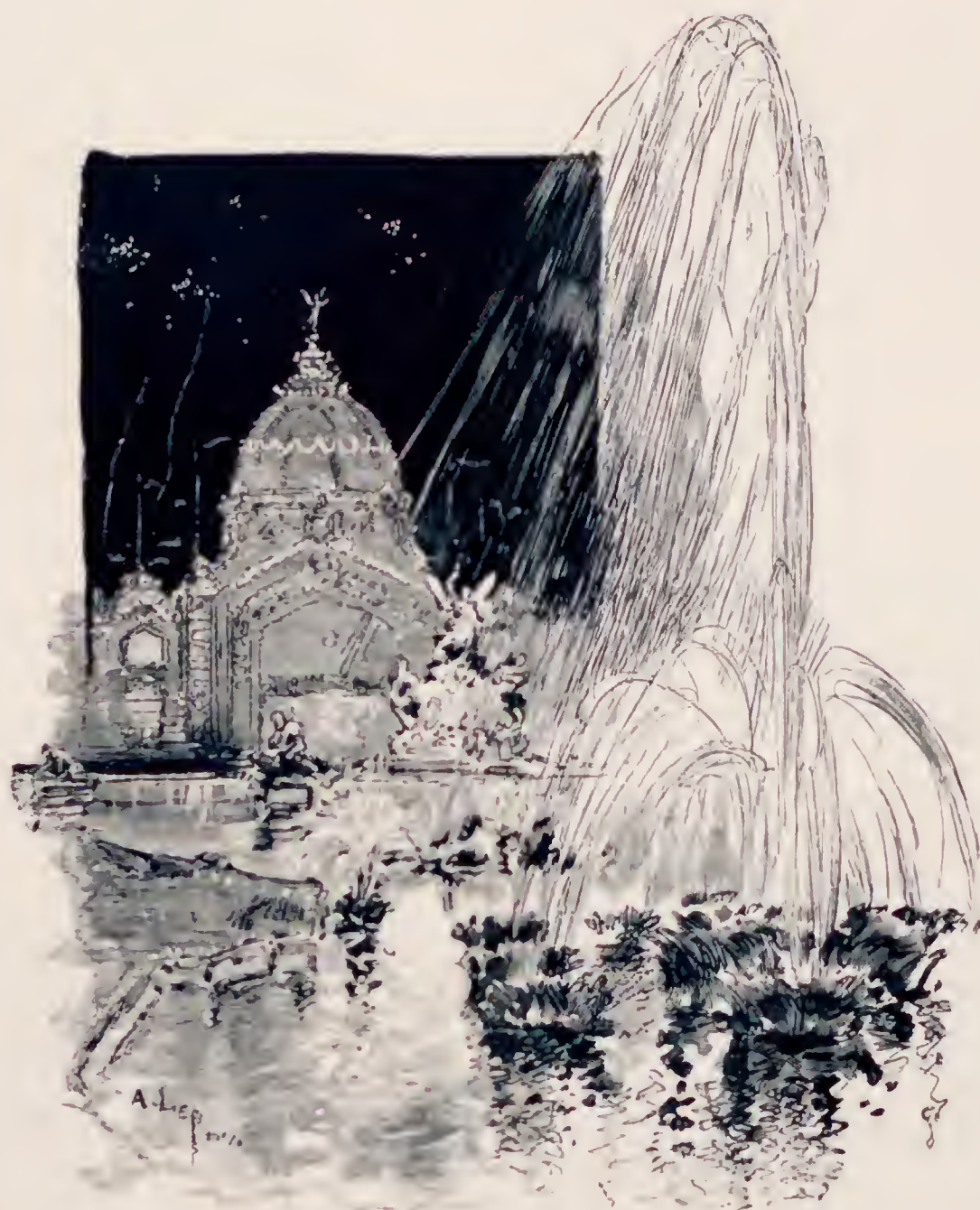
"The astronomer, from these heights,
Will he see better the shocks
Of worlds, the stars and the nebulae?
—Not at all, you can there drink bocks.'"

And a third verse of this ballad declared that Mount Blanc would shrug his shoulders when he should think of the Eiffel Tower!

Notwithstanding all these assaults it was decided by M. Lockroy, Commissioner General of the Exposition, and MM. Alphand and Berger, Directors General, that the tower should form one of the buildings of the great World's Fair, and this decision was ratified by the Commission of Control and of Finances at its sitting of the 5th of November, 1886, when a credit of 1,500,000 francs was voted for the subsidy asked for by M. Eiffel. Various sites were proposed for the new tower of Babel, in the middle of the Champ de Mars, at the southern



PERSIAN CHIMNEY IN FAIENCE.



CENTRAL DOME AND FOUNTAINS.

end, near the Military School, and on the Trocadéro. The present locality was decided upon as being the best for enabling the edifice to fulfil its function as a sort of gigantic door-post to mark the entrance to the Exposition, and also because administrative reasons would not permit its erection upon land belonging to the State. Numerous borings were made to determine the nature of the soil and its capacity for sustaining the weight of the tower—7,000,000 of kilogrammes, and 9,000,000 with all its accessories. For the two piles on the side of the Military School no difficulty was experienced, a strata of sand and gravel, six metres in depth, furnished the necessary solidity, and in this were laid the foundations in a layer of beton two metres in thickness. The soil on the side towards the Seine was much less suitable, and it was found necessary to lay the foundations here in caissons in sheet-iron, fifteen metres long and six wide, placed five metres below the level of the water, and to the number of four for each pile. M. Eiffel says that the pressure on the earth of the foundations on the river side is 3.7 kilogrammes per square centimetre, and on the other side, three kilogrammes. That of the ordinary buildings in Paris seldom exceeds two kilogrammes a square centimetre. In addition to the security afforded by its weight, the tower is securely anchored to its foundations.

The first platform, or story, at a height of fifty-six metres, contains 4950 square metres of space and was occupied, during the Exposition, by an Anglo-American bar, a Flemish beer saloon, and a French and a Russian restaurant. According to M. Eiffel, this landing is capable of receiving 3500 visitors at once. The second platform contains 1400 square metres, space for a thousand persons at once, and is one hundred and fifteen metres above the earth. Here were placed the *Figaro* printing office and a Viennese bakery. The third platform, 273.13 metres in the air, contained a space of eighteen square metres, capable of receiving three or four hundred persons at once, and is surrounded on all sides by large glass windows which can be shut on the side from which the wind blows, a very necessary precaution at that chilly height. The public were not allowed to mount by the little winding stairway which led to the small chamber in the extreme top where were kept the scientific instruments and the apparatus for the electrical lighting. The extreme summit was just three hundred metres above the earth, and above that rose the immense lightning-rod and the flag-staff.

There were three styles of elevators in use during the Exposition, those of the east and west piles being of the French system Roux, Combaluzier and Lepape, running from the foot of the tower to the first platform, carrying a hundred persons at each trip and mounting with the speed of a metre a second. The Otis elevators, in the north and south piles, ran as high as the second platform and carried fifty persons at once at a rate of two metres a second, taking only a minute from the base to the second platform. The peculiarity offered by these elevators was, that in mounting from the ground to the first platform they were obliged to follow the curved lines of the structure, altering their level with every foot of ascent. From the second platform to the top, the visitors were carried in still another elevator, the Edoux, the two of which acted as counterweights for each other, controlled by two hydraulic pistons, and which carried sixty passengers each. By all these means, and by making use of the stairways, M. Eiffel declared that it was possible for five thousand people to visit his tower in an hour.

The experiences of the multitudes who made this ascent have been too often repeated to be of interest at this late date, but the enterprise of a Parisian journalist who mounted to the top of the unfinished tower in February, 1889, furnished him with matter for a lively narrative, in which he contrived to make the very most of his adventures. His journal, "published at the solicitation of friends," is carefully dated and annotated at the fractions of an hour, and with accurate readings of the barometer and thermometer and observations of the state of the atmosphere at various stages,—and with a judicious reference to Tartarin of Tarascon on the Righi to disarm the too critical reader. At eight o'clock on the morning of the 24th when he awoke, the meteorological symptoms were decidedly unfavorable, but M. Eiffel had given him rendezvous at two o'clock at the foot of the tower and the ascent could not be postponed. At one-thirty, when he took a cab to go to the Champ de Mars, he consulted the driver as to the probabilities,—the Parisian cabbies being excellent weather judges, viewing the amount of time in which they are exposed to it—but that expert gave him but small comfort. The wind was from the north-north-east, he said, the *giboulées* were going to continue and the *ciel* would not uncover itself. And he took another turn of his comforter around his chin. At two o'clock, precisely, the adventurer arrived and found M. Eiffel awaiting him. There were about fifteen tourists and some ladies who proposed to mount to the second story only. The narrator was furnished with a guide who was to accompany him to the extreme summit. Four or five of the most experienced of these travellers had provided themselves with caps with ear pieces and furred gloves, silk hats offering far too much surface to the wind, and the cold of the iron hand-rail "burning" the hand. At half past two, exactly, in Indian file, M. Eiffel and the guide at the head, they entered the right pillar; "the thermometer registered one degree above zero, the weather was still threatening but the snow no longer fell." The three hundred and fifty steps leading to the first platform were surmounted without accident; "M. Eiffel advised me to imitate his method of ascending. He mounted very slowly, the right hand on the rail. He balanced his body from one hip to the other, and profited by this spring to ascend each step. Here the slope is so moderate that we could talk as we climbed,—and no one was out of breath when we came out on the first platform." At five minutes past three they had their first view of the vast panorama below them; the city and all its life had become suddenly stilled, like a map, and the only motion was in the waves which traversed the surface of the Seine. At three twenty-five, ten of the party commenced the ascent of the little winding stairway that led to the heights above; in twenty minutes more they came out on the second platform, where they found a circular railway, a steam-engine and a shelter in which the workmen took their repasts. Through an opening the journalist looked down the now vertical descent into the abyss,—and felt the chill creep from his thighs to his neck. The cold was more keen than below, the thermometer had descended to zero.

"Ten minutes past four in the afternoon. This suffering from



THE BEY'S SALON.



WEAVING IN ANCIENT EGYPT.

the cold is suddenly increased ten-fold by the wind and by a squall which assailed us. On the stairway the cold of the iron so affected my hands that I tried to mount with them in my pocket, without holding the rail. But the wind buffeted me, and the rain and hail blinded me, so that I was forced to take hold of the rail again and ascend covering my face with my arm. Thus I climbed for a quarter of an hour, without thinking of looking at the view. I saw nothing but the overcoat of M. Eiffel who preceded me. We no longer talked." At thirty-five minutes past four they came out on the "intermediate platform," two hundred metres in height. The squall had ceased, but the wind was much stronger and the cold keener. The thermometer was one degree below zero, all the water

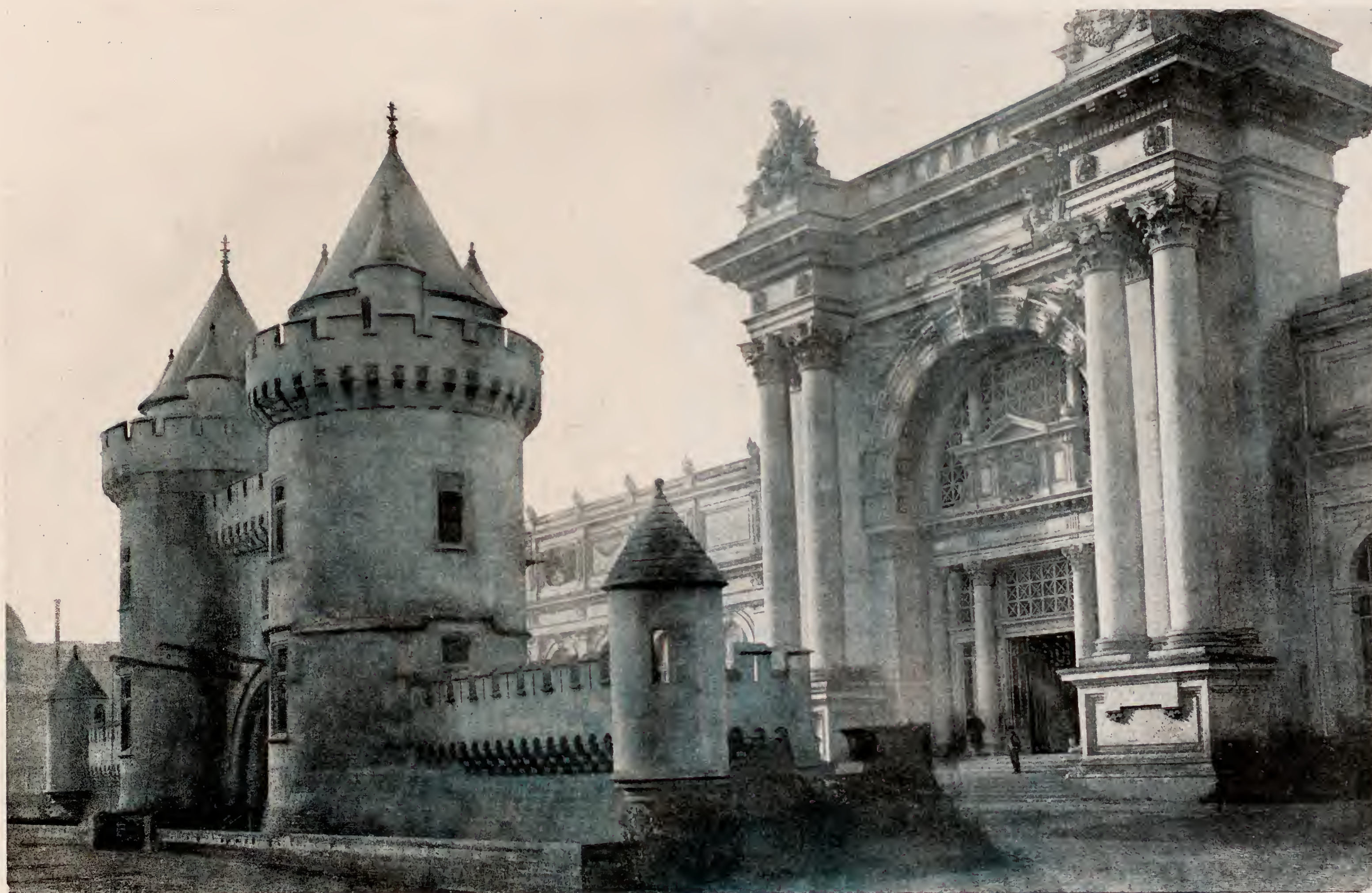
in the vessels was frozen and icicles hung from all the St. Andrew's crosses formed by the diagonal braces of the iron-work. It began to appear to the traveller that his legs were a trifle limp. It was not altogether vertigo, "The fatigue, the confusion produced by the wind, and also the surprise of that impression so familiar to aëronauts;—Space.

"It is veritably at this height that one enters in the void.

"The four members of the tower, now sensibly approaching each other, give to this platform the appearance of the basket of a balloon. The air, the light, assails you from all the four cardinal points at once. And, in the absence of the structure which kept them out, one has for the first time the sensation of suspension, of isolation."

At five o'clock, exactly, they resumed their ascent towards the summit. But "at the moment of setting foot on the iron stairway, it was seen that it was not fastened at the top. It oscillated under your weight. This suddenly cooled the zeal of the ascenders who had accompanied us as far as the 'Intermediate Platform.' 'The day is closing,' they said, all at once. 'We shall not discover anything up there that we have not already seen.' And they went away, like the unworthy soldiers that Gideon left on his road. There remained four of us; M. Eiffel, M. Richard, the constructor of meteorological apparatus, who, last year, planted his tent for three days on the summit of Mount Blanc, then the guide and myself. I have not made the ascension of Mount Blanc, but this present excursion seemed to me to be somewhat moving. Especially when, after having left the steps which ceased under us, we began climbing ladders.

"There were no longer either steps or hand-rails. The ladders were set on madriers which shook in the void. They were bound together, at the tops, by cords. It was not well to look either at the right nor the left, but only at the ladder-step under you." On the third and uttermost platform, two hundred and seventy-five metres in the air, they found the workmen, to the number of a dozen, sheltering themselves as best they could behind canvases from the wind. M. Richard said that his apparatus frequently recorded a velocity of 11.10 metres per second. The laborers, muffled up to their eyes, were driving rivets, the sparks drifted, the blows rang in the empty air. The journalist approached to the edge to look over, and instinctively took hold of a rope to steady himself. The rope immediately descended under his hand and M. Eiffel cried "Let go! Let go! It is a pulley; I should have told you that it is a rule in buildings never to lean on a cable of any kind." The narrator released it promptly, but lost his interest in the view below:—a half hour later they were all seated on the second platform, reposing after their fatigues and perils. M. Eiffel was saying that a number of the artists who had protested against his tower had already made *amende honorable*, and the journalist got off a pun. *Cadit quæstio.*



PALACE OF THE MINISTER OF WAR.

THE Indian palace, on the farther side of the Palais des Arts Libéraux, was a handsome building composed of long galleries supporting a row of small domes and with a larger one, white, ten-sided, and with red angles, crowning the intersection of these galleries with a central transept which was terminated at its four angles by slender towers, something between minarets and campaniles. The exterior walls were dark red in color, striped with horizontal bands of white stone finely carved, pierced with square windows, and ornamented by long verandas, one on each side of the main entrance, with twelve pillars in white stone each. At the exterior angles of the galleries were slender towers, similar to the others, and the decoration in relief, of which there was a great deal, was repeated in *staff* from ancient native models preserved in the South Kensington Museum. The interior of the rotunda under the central dome, shown in the illustration, was very effective in its whiteness, and was said to have been reproduced, in its general lines, from one of the most celebrated monuments of Delhi. Handsome octagonal columns, with broken angles, sustained the balcony of the first story, which was embellished with growing plants. In the centre of this open space was a fountain vase of white marble, supported by antique lions. The architecture seemed to show the influence of the art of the Arabs acting on that of Buddhism. In this Eastern interior, the visitor might sit at his ease and be served with cups of tea by picturesque native



AMERICAN INDIANS, HISTORY OF HUMAN HABITATIONS.

attendants of a light coppery-brown color, black whiskered and bearded, and clothed all in white, with tri-colored sashes. They were all Mussulmans, and it is said the followers of Mohammed make better servitors than those of Buddha;—though why fatalists should possess this advantage over the seekers of nirvâna does not appear.

The exposition of Morocco was a sort of continuation of the *rue du Caire*, and comprised a series of buildings, cafés, pavilions, arcades, and a larger one commanding them all and which was white and square, surmounted by a white dome. The façade of this *Pavillon impérial* had a large portal, two windows in horseshoe arches, and some star-shaped openings which admitted the light. The entrance was through a sort of loggia, with a ceiling painted in green and red, the colors of the Prophet, the walls covered with blue and white tiling and the red standard of Morocco rolled around its staff, in a corner. The walls of the square chamber under the dome were ornamented in the manner of a frieze with an inscription from the Koran in Cufic characters signifying that there is nothing higher than God. The objects exhibited and offered for sale in this and adjoining buildings were the usual ones, so familiar in this locality, stuffs, woven, embroidered and striped, slippers, beds, rugs, stools, potteries, sabres, pistols and saddles. There might also be purchased in the arcades various cheap forms of jewelry, pipes, etc., and divers beverages and confitures.

Tunis, on the contrary, on the Esplanade des Invalides, offered rather more variety. On certain occasions

there might even be seen a real Arab "fantasia," executed in an enclosure before an admiring crowd of visitors, with considerable noise, galloping and gunpowder smoke. Even the *danse du ventre*, in the national café, presented some new features in the rather remarkable costumes of the seven dancers, the costume of the Jewesses of Tunis and which, it is said, has been preserved unchanged from the reign of King Solomon. The very loose blouse which covers the upper part of the body and descends to the commencement of the thighs is cherry-colored, violet or blue, the trousers are of white calico or cotton-cloth and rather alarmingly tight, and an embroidered handkerchief or pointed cap is placed on the thick, black, pomaded and plastered hair. The effect of this attire is increased by the embonpoint of the wearers,—a quality much in favor with the ladies of the Orient. In the various shops and booths were offered for sale with much volubility by vendors presumed to be native, cigarettes, fritters and various other fried dishes, pottery, glass-ware and cocoanuts carved into negroes' heads.

The palace of the Regency was a handsome and authentic edifice, the work of a young architect, M. Saladin, who had visited the country on an archæological mission and who had endeavored to reproduce in each face of the building a type of the best native architecture. There was, for instance, a façade and a dome taken from



RELIGIOUS CEREMONY IN BUDDHIST TEMPLE, THE ESPLANADE DES INVALIDES

Kairouan, and a slim minaret, thirty-six metres high, known as the Monument of Sidi-ben-Arrouz, built of pale red bricks and topped with a green, cone-shaped lantern. In the exterior walls were set verandas and lattice-work windows, borrowed from some of the old houses of Tunis, and in the centre of the inner court, paved with mosaics and marble, gurgled a little fountain. Around the court ran a low gallery, supported on slender columns, and the partition walls were decorated with enameled tiling showing blue and yellow flowers and foliage scrolls, reproductions of the facings of the walls of the Bardo or government building at Tunis. The display in this building was a curious assemblage of exhibits of the old civilizations and the new, Roman coins and French educational statistics, Latin inscriptions and photographs of recent public works.

THE Persian chimney-piece, of our illustration, was one of the ornaments of that section, one of the least in size of the general exhibitions of the Champ de Mars, "but engaging in the highest degree," says a chronicler, "by its *Asianism*. I saw in the pavilion of Public Works a small restoration of the palace of Artaxerxes, at Suze, by M. Dieulafoy, plated externally with the frieze of the Lions, and internally with that of the Archers, which are in the Museum of the Louvre, reproduced in miniature, and I noted with admiration how



TERRACE BEFORE THE PALACE OF LIBERAL ARTS.

this Persia, so fallen, has still guarded in its decadence the taste for ornamental ceramics. I saw there a very handsome chimney in porcelain, the panels swarming with figures of horsemen, and a number of beautiful enameled vases, the decoration blue or green spotted with a little red, of which some were ancient and others modern. It was these, according to my notions, which gave the exquisite note of this exposition. The rest consisted of brilliant carpets, of fine shawls, of steel weapons, sabres and knives, and the products of the soil—grain, opium, specimens of the wine of Chiraz in squat and singularly shaped bottles. Two or three small paintings, in a traditional style of art evidently borrowed from India, represented noblemen kneeling, the eyelids half closed, before the sovereign sparkling with precious stones and similar to an idol. Mohammedanism has been able to conquer the half of Asia, but it has not suppressed anywhere the hierarchal character of its institutions and of its manners.”

THE curious little engraving representing “an interior” in ancient Egypt with a group of women weaving is a reproduction of one of a number of similar scenes, very carefully gotten up, and illustrating the “Retrospective History of Labor,” in all ages. The subject was, naturally, much too vast to be adequately treated in the time or space at the disposal of the organizers, but a very great amount of material had been collected and arranged and displayed with much intelligence, and this section was one of the most interesting features of the whole Exposition. The *Histoire rétrospective* was divided into five sections: 1. Archæology and the anthropological sciences; 2. Liberal Arts; 3. Means of transportation; 4. Arts and Trades; 5. Military Arts. The latter, furnished with a credit of 800,000 francs, and placed under the charge of the Minister of War, had a building and a display of its own on the Esplanade des Invalides. The four other sections, provided each with a modest credit of 60,000 francs, were arranged in the grand nave of the Palais des Arts Libéraux on a two-story construction, somewhat Scandinavian in its architecture and painted in green and brownish-red. In the second section of the five divisions, the liberal arts, were included Physics, Chemistry, Astronomy and the Theatre. At the entrance of Section 1 was placed an immense seated statue of Buddha, in gilded wood, from Nara, and lent by M. S. Bing. The lower story of this first section was occupied by groups of pre-historic and other workers, the ancient ones restored according to the latest scientific knowledge. The four ages of primitive humanity were represented by, the Mammoth Age, the first builders; the Reindeer Age, the first artists; the Age of Polished Stone, the first

manufacturers; the Bronze Age, the first metal-workers. In the middle was placed a camp of Samoyedes, and in other places, some African metal founders and Aztecs manufacturing agave paper, showing the survival of ancient processes and ancient types down to the present time. Succeeding these were still other groups and figures, equally interesting—a Chaldean architect, presented by M. Henzey; the Egyptian weavers of the illustration, furnished by M. Maspéro; a Greek potter at work in a room of an Athenian house, restored from vase paintings, by MM. Georges Perrot and Collignon; the shop of a Gallo-Roman potter; a group of Chinese workers in cloisonné enamels. The other sections of this department were furnished generally without manikins of any kind, but with an enormous collection of models, restorations, objects, plans and engravings of every kind, in bewildering profusion. Over all floated the balloon shown in the engraving on page xvii, and which was part of the furnishing of the history of the means of transportation in all times and countries.

The wood-engraving, showing an American interior and some presumable Indians engaged in basket-making, is not from this section of the history of labor but from that of the "human habitation." If the scene does not seem to be too familiar to our eyes we may remember that it is Franco-American.

The handsome little wheeled throne, however, is quite genuine, and was included in the contribution of Anam to the history of locomotion. The religious ceremony in the Buddhist temple on the Esplanade des Invalides was not for the benefit of the general public but only for that of the Anamese contingent of the section of the Colonial exhibit. There were about two hundred of these, and for their spiritual welfare, M. Dumontier, formerly interpreter at the French Residence in Hanoi, had secured the services of nine bonzes, with the consent of the viceroy of Tonquin. Of these native priests, three officiated, three were acolytes and three servants. Their religious services consisted, apparently, in presenting before the fifteen idols in gilded wood, ranged in their hieratic rank on the five degrees of the high altar, flowers, fruits and rice cakes, and then, squatting in a semi-circle facing their gods, abandoning themselves to the chanting of interminable psalms, accenting, from time to time, by the striking together of bronze gongs and wooden plates. The pagoda itself was known officially to its frequenters as that "of the Great Tranquillity," and was such a faithful reproduction of the generic models of those of Anam and Tonquin that it was accepted by the bonzes as being quite "like those over there." The architect was M. Lichtenfelder, pupil of the Ecole des Beaux-Arts, greatly aided by the knowledge of M. Dumontier, and it was set up on the banks of the Seine by M. Foulhoux,—His Majesty, the king of Anam himself, furnishing the magnificent columns in *lim* wood, fine as bronze, from the royal forests of Thanh-Hoa.



JAVANESE DANCERS AT TOILETTE.



PAVILION OF THE PASTEL SOCIETY.

